

Rocky Flats Environmental Technology Site 1-COOP-GLOSSARY

REVISION 0

CONDUCT OF OPERATIONS MANUAL GLOSSARY



APPROVED BY: mmm Donald / mmm McDonald / 06/27/95
Director, Print Name Date
Organizational Effectiveness

Responsible Organization: Organizational Effectiveness Effective Date: 6/26/95

CONCURRENCE BY THE FOLLOWING DISCIPLINES IS DOCUMENTED IN THE GLOSSARY HISTORY FILE:

Building Deactivation
Engineering & Safety Services
Performance Assurance
Waste Stabilization

CONTROLLED COPY

USE CATEGORY 4

ORC review not required

The following have been incorporated in this revision:
95-DMR-000515

Reviewed for Classification/UCNI

By Mary B. Fure (11/NU)
Date 6/22/95

Periodic review frequency: 3 years from the effective date

PADC-95-02053

ADMIN RECORD

SW-SW-A-03002

TABLE OF CONTENTS

(April 25, 1997)

<u>Section</u>	<u>Effective Date</u>	<u>Revision</u>
1-COOP-GLOSSARY	06/26/95	0
1-31000-COOP-001, Conduct of Operations	07/15/92	0
93-PCN-000270	05/18/93	
93-PCN-000285	06/08/93	
93-DMR-000355	09/17/93	
94-DMR-001411	08/26/94	
95-DMR-000023	03/22/95	
95-DMR-000418	05/01/95	
95-DMR-001059	09/25/95	
96-DMR-000790	09/04/96	
97-DMR-000279	04/25/97	
1-31000-COOP-002, Internal Surveillance Program	10/27/92	0
1-31000-COOP-003, Control of On-Shift Training	10/27/92	0
1-31000-COOP-004, Vital Safety Systems Operational Status	10/27/92	0
1-U70-COOP-005, Authorization Basic Tracking and Documentation	06/01/95	0
1-31000-COOP-006, Operating Area Logs and Records	10/27/92	0
94-DMR-000122	02/01/94	
94-DMR-001161	11/01/94	
95-DMR-000997	10/26/95	
1-31000-COOP-007, Shift Relief and Turnover	10/27/92	0
93-DMR-000784	12/17/93	
1-31000-COOP-008, Control of Caution Tags	07/15/92	0
1-31000-COOP-009, Control of Information Tags	Canceled 09/02/91	
1-31000-COOP-010, Control of Operator Aids	10/27/92	0
1-31000-COOP-011, Pre-Evolution Briefing	10/27/92	0
93-PCN-000287	09/17/93	
94-DMR-000862	06/03/94	
94-DMR-001167	06/17/95	
94-DMR-001324	08/15/94	
94-DMR-002059	11/10/94	
94-DMR-002275	02/01/95	
95-DMR-000302	08/01/95	
96-DMR-000765	09/15/96	
1-31000-COOP-012, Shift Operating Rounds	10/27/92	0
PADC-91-00800		

CONTROL DOCUMENT
(If numbered, insert in block numbering
indicates revision only copy)

569
Copy Number

ADMIN RECORD

TABLE OF CONTENTS
(January 1, 1998)

<u>Section</u>	<u>Effective Date</u>	<u>Revision</u>
1-G58-COOP-013, Standing, Shift, and Operations Orders	08/15/94	0
94-DMR-001772	10/28/94	
94-DMR-002083	12/21/94	
94-DMR-000617	05/05/95	
1-31000-COOP-014, Independent Verification	07/15/92	0
1-31000-COOP-015, Communications Criteria	10/27/92	0
1-31000-COOP-016, Plan of the Day (POD)	10/27/92	0
1-31000-COOP-017, Controlled Deactivation of Alarms	07/15/92	0
1-31000-COOP-018, Vital Safety System Status Control	Canceled 10/12/94	
1-31000-COOP-019, Returning Systems and Equipment to Service	Canceled 05/01/95	0
1-C15-COOP-020, Termination of Operations Process	04/07/97	1
97-DMR-000622	05/19/97	
97-DMR-000835	09/18/97	
97-DMR-001776	01/01/98	
1-C16-COOP-021, Operability Determination Process	Canceled 04/25/97	0
1-H89-COOP-022, Inactivation of Equipment and Areas	Canceled 06/01/95	0

LIST OF EFFECTIVE PAGES

<u>Pages</u>	<u>Effective Date</u>	<u>Pages</u>	<u>Effective Date</u>
1-14	06/26/95		

The following DMRS are active for this procedure:

None

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
TITLE PAGE	1
LIST OF EFFECTIVE PAGES	2
TABLE OF CONTENTS	3
1. PURPOSE	4
2. SCOPE	4
3. DEFINITIONS	4

3. DEFINITIONS (continued)

Basis for Interim Operation (BIO). Establishes the interim safety basis for a facility, including restrictions placed on operations and administrative controls in effect during facility upgrades. The BIO contains the information which the Department of Energy (DOE) depends on for the conclusion that operations at a facility can be conducted safely on an interim basis until the Safety Analysis Report (SAR) and the Technical Safety Requirements (TSR) documents have been approved.

Caution Tag. A posting prescribing special cautionary measures for the operation of equipment.

Compensatory Measures. Temporary actions planned and implemented to provide an acceptable alternate means to meet the intent of the functional requirements afforded by the normal structure, system, or component (SSC) configuration and operation. When normal system operation has failed and compensatory measures are approved by an Engineering Operability Evaluation (EOE), implementation of the specified compensatory measures is required to maintain the SSC status as conditionally operable. Compensatory measures are not corrective actions (actions required to return the SSC to an operable status).

Conditionally Operable. Situation where a building structure, system, or component (SSC) is degraded but can still perform the intended safety function with the implementation of one or more compensatory measures. Conditionally operable systems are deemed in compliance with the Operational Safety Requirement (OSR) definition of operable, as long as the specified compensatory measures are maintained. [Note that once an SSC has been declared conditionally operable, the identified compensatory measures are a mandatory prerequisite (the SSC is inoperable until the compensatory measures have been implemented).]

3. **DEFINITIONS (continued)**

Evolution Supervisor. Individual who originates and proposes an evolution; identifies the scope of, prepares and conducts the pre-evolution briefing (PEB); and submits the PEB Record to the Shift Manager. This person is usually the supervisor of operations and support personnel conducting the evolution.

Expiration Date. The date that a document will expire.

Graded Approach. A process by which the level of analysis, documentation, and actions necessary to comply with a requirement are commensurate with the relative importance to safety, safeguards, security, environment, and health; the magnitude of any hazard involved; the life cycle stage of the facility; the programmatic mission of the facility; the particular characteristics of the facility; or any other relevant factor.

Independent Verification. The act of checking a condition, such as a component position, separately from activities related to establishing the condition or the component's position.

Information Tag. A temporary posting containing general information, not of a safety nature, to assist operating personnel in the performance of their duties until a formal posting is issued or the information is no longer needed.

Inoperable. A condition where a structure, system, or component (SSC) is no longer capable of performing the intended safety function in the required manner (neither operable nor conditionally operable).

Issued or Date of Issue. Same as the approved or approval date.

3. DEFINITIONS (continued)

Operations Order. A document that communicates timely instructions or directions from the Operations Manager to operations and other facility personnel. Operations Orders may contain technical instructions, administrative direction, administrative policy, administrative instruction, special operations, special evolutions and tests, operating experiences, industry-wide concerns, or emphasis on existing procedures.

- **Administrative Operations Order.** An Operations Order that is strictly administrative, based on an evaluation performed in accordance with the Operations Order Evaluation Checklist. Administrative Operations Orders have a maximum effective duration of 18 months.

Examples of Administrative Operations Orders include those written for the benefit of the building personnel to clarify and organize other orders and procedures. Although an Administrative Operations Order may have technical content, it remains only administrative in nature and does not allow for performance of physical work (such as valve and equipment operations or electrical lineups).

- **Interim Operations Order.** A Technical Operations Order issued by the Operations Manager before all of the external reviews are completed. The urgency of the Interim Operations Order is such that implementation is required for safety concerns before the review process is completed. The decision for the urgency is the responsibility of the Operations Manager.
- **Technical Operations Order.** An Operations Order that has technical content based on an evaluation performed in accordance with the Operations Order Evaluation Checklist. Technical Operations Orders require external review and have a maximum effective duration of 12 months.

Operator. A person designated by operations management to perform operations, operate support systems, or conduct activities that apply safety principles and processes to a structural facility or area of operational responsibility with safety-related systems and/or radioactive, hazardous materials, or waste at Rocky Flats.

3. **DEFINITIONS (continued)**

Pre-Evolution Briefing (PEB). A complete review of the tasks necessary to perform an approved evolution, including applicable procedures, publications, operational safety analysis, and other pertinent safety precautions.

Procedure Use Category 1. Use Category 1 indicates that the procedure must be in the possession of the performer, or a designated procedure reader, and each step of the procedure is performed as written. Either the tasks are complex in nature and are not routinely performed; or the consequences of improper action during the performance of the tasks could have a significant adverse impact on personal health or safety, site security, the environment, or equipment.

Procedure Use Category 2. Use Category 2 indicates that the tasks in the procedure require immediate or prompt action and time constraints may prohibit the procedure being in hand during the performance of the initial steps, even though failure to perform these tasks correctly may have significant consequences. A working or controlled copy is available at the work location for timely use.

Procedure Use Category 3. Use Category 3 indicates that the procedure need not be in hand for the performance of the described task, because the tasks are simple or routine, and failure to perform each step in sequence will not have a significant adverse impact on personal health or safety, site security, the environment, or equipment. A working or controlled copy is available for reference at the work station.

Procedure Use Category 4. Use Category 4 is used for procedures that do not meet the requirements for Categories 1, 2, or 3. A working or controlled copy is available for reference at a known location in the general area.

Qualified Staff Member. An individual on the Operations Manager's staff whom the Operations Manager deems capable, competent, conscientious, and who is considered to have the expertise on the subject matter [a Subject-matter Expert (SME)].

3. **DEFINITIONS (continued)**

Shift Order. A document that communicates timely information that is pertinent for only a short time from the Operations Manager to the shift operations personnel. A short time is defined as overnight, over a long weekend, or over a holiday period, but not longer than 30 days. Information may include such items as impending procedure changes, equipment changes, or notification of work priorities, upcoming evolutions, and facility visits.

The difference between Shift Orders and Operations Orders is that Shift Orders convey information to personnel from shift-to-shift, and are effective for 30 days or less; whereas, Operations Orders convey administrative or technical instructions or directions and are effective for up to 18 mo and 12 mo, respectively.

Spurious Alarm. An alarm that actuates for other than its designed intent.

Standing Order. A document issued by a responsible member of senior management that provides formally documented administrative guidance or instruction applicable to the site, until a permanent document is properly processed or until the administrative guidance or instruction is no longer appropriate. Standing Orders do not conflict with approved procedures and have effective periods not to exceed 12 months.

Surveillance Requirements (SRs). The testing, monitoring, inspecting, servicing, or auditing that is performed to verify that the systems and components important to safety are operable and meet the functional and performance capabilities as required in the Limiting Conditions for Operations (LCOs).

Telephone Concurrence (Telecon). Document approval or concurrence received by telephone.

Terminate Operations. The actions required to achieve a timely and safe shutdown of affected operations. Actions are taken in accordance with contractor-written procedures up to and including the safe shutdown of operations in the entire building, as defined within the Operational Safety Requirement (OSR).

03/14/97

APPENDIX 3
Page 1 of 3

Page 1 of 1			DOCUMENT MODIFICATION REQUEST (DMR) <i>Print or Type all information (except signatures)</i>			25. DMR No. 97-DMR-000 279		
Originator								
1. Name/Phone/Pager/Location Frank Gibbs 2786/6006 Bldg. 441						2. Date 3/24/97		
3. Existing Document Number and Revision 1-31000-COOP-001 Revision 0						4. Document Type: <input type="checkbox"/> Policy <input type="checkbox"/> Manual <input type="checkbox"/> Directive <input checked="" type="checkbox"/> Procedure <input type="checkbox"/> Instructions <input type="checkbox"/> Job Aid <input type="checkbox"/> Other		
5. Document Title Conduct of Operations								
6. Item	7. Page	8. Step	9. Proposed Modification					
	81 & 82		Delete steps 5.4.12 through 5.4.12.6.					
	100		Delete Appendix 1, System Return-To-Service and Operability Checklist					
			Update the TOC and the LOEP.					
10. Item 10. a Justification (Reason for Modification, EJO #, TP#, etc.) The section being deleted has been incorporated in 1-C15-COOP-020 R/1, Termination of Operations Process.								
11. <input checked="" type="checkbox"/> Process (Complete Blocks 13-22) <input type="checkbox"/> Do not Process (state reason in Block 10 a)						(print/sign/date) V.M. Pizzuto 3/25/97		
12. Assigned SME/Phone/Pager/Location Frank Gibbs 2786/6006 Bldg. 441						13. New Document/Rev. No. (if new or changed) N/A		
Complete either Section 14a or 14b as applicable								
14a. Type of Complete Modification <input type="checkbox"/> New <input type="checkbox"/> Revision <input type="checkbox"/> Cancellation <input type="checkbox"/> One-Time-Use			14b. Changes: (check the applicable boxes) <input checked="" type="checkbox"/> Intent Change <input type="checkbox"/> Nonintent Change <input type="checkbox"/> Editorial Correction <input type="checkbox"/> Regular <input type="checkbox"/> Interim Approval Request - Needed for Immediate use (30-day limit for obtaining final approval)				Additional Attributes: <input type="checkbox"/> Temporary <input type="checkbox"/> One-Time-Use <input type="checkbox"/> Limited Distribution	
15. ERM Change Control Board Required: <input type="checkbox"/> Yes <input type="checkbox"/> No (Applicable only to new procedures, revisions, and intent changes.)								
List the reviewing organization in Block 16. After concurrence has been obtained on the Comment Sheet, enter the name of the reviewer followed by /s/ in Block 17. If the reviewer indicates No comments, the review signature constitutes concurrence. Enter the date concurrence is obtained in Block 18.								
16. Reviewing Org.	17. Name of Reviewer for that Organization	18. Date	16. Reviewing Org.	17. Name of Reviewer for that Organization	18. Date			
EC&M	IS/G.M. KELLY	4/1/97						
Nuc Ops	IS/Hal Bluder	4/25/97						
RMRS	IS/Hal Bluder	4/25/97						
SSOC	IS/R.A. ESCHENBAUM	4/10/97						
Nuc Eng	IS/ART STITHM	3/28/97						
19. Prescreen/SES/USQD Number PRE-RFP-97.0635-ARS			20. Independent Safety Review Meeting and Date SORC 97-024 Reviewed by V.P. w/responsibility for the Policy Program, (print/sign/date) N/A					
21. <input type="checkbox"/> Process Policy Action (This block required for Policies only) <input type="checkbox"/> Do not Process (state reason in Block 10a)								
22. Approval Authority signs after obtaining ALL required signatures. R E KELLY						(print/sign/date) R E KELLY 4/25/97		
						23. Effective Date 4-25-97		
						24. Expiration Date		

97-DMR-000202

CONTROLLED COPY

Document Modification Request

25. DMR No. 96-DMR-000790		
2. Date September 4, 1996		
4. Document Type: <input checked="" type="checkbox"/> Procedure <input type="checkbox"/> Plan <input type="checkbox"/> Other		
5. Document Title Conduct of Operations		
6. Item	7. Page	8. Step
1	76	5.4.7.4.9 Replace step with the following: "When actions necessary to return the facility to compliance with the OSR, restart shall be accomplished in accordance with Conduct of Operations Chapter 20, Termination of Operations Process."
2	75	5.4.7.4.10 Delete step 5.4.7.4.7.2 Change DOE/FO Facility Representative to the Division Director of the Integrating Management Contractor
10. Item		
10a. Justification (reason for modification, EJO #, TP #, etc.) Changes made based on technical direction received from the Department of Energy (DOE) in reference ABGJMC:07116, Scope of Termination for Operational Safety Requirement Out of Tolerances, Dated June 20, 1996		
11. <input checked="" type="checkbox"/> Process (print/sign/date) <input type="checkbox"/> Do not Process (state reason in Block 10a)		
12. <input checked="" type="checkbox"/> Process (Complete Blocks 13-22) <input type="checkbox"/> Do not Process (state reason in Block 10a) D. B. Branch, Jr. DBR/jr 9/4/96		
13. New Document/Rev. No. (if new or changed)		
Complete either Section 14a. or 14b., as applicable. For procedures, attach completed Procedure Modification Worksheet from 1-A01-PROC DEV-400.		
14a. Type of Complete Modification B446 <input type="checkbox"/> New <input checked="" type="checkbox"/> Revision <input type="checkbox"/> One-Time-Use <input type="checkbox"/> Cancellation		
14b. Changes: (check all that apply.) <input type="checkbox"/> Intent Change <input checked="" type="checkbox"/> Nongrant Change <input type="checkbox"/> Editorial Correction <input checked="" type="checkbox"/> Regular <input type="checkbox"/> Interim Approval Requested - Needed for Immediate Use (14-day limit for obtaining final approval)		
15. ERM Change Control Board Required: <input type="checkbox"/> Yes <input type="checkbox"/> No (Applicable only to new procedures, revisions, and intent changes.)		
List the reviewing disciplines in Block 16. After concurrence has been obtained (in accordance with 1-A01-PROC DEV-400), enter the name of the reviewer followed by /s/ in block 17. If the reviewer indicates No comments, the review signature constitutes concurrence. Enter the date concurrence is obtained in Block 18.		
16. Organization	17. Reviewer/Concurrence	18. Date
SSOC	<i>[Signature]</i>	9/4/96
Site Operations Integ	<i>[Signature]</i>	9/4/96
ER/WM&I	<i>[Signature]</i>	9-4-96
RMRS	<i>[Signature]</i>	
Safety Engin Integ.	<i>[Signature]</i>	9/4/96
SMM&I	<i>[Signature]</i>	9/4/96
19. Assigned SME/Phone/Page/Location DB Branch Jr. / 3602/371 DBR/jr		
20. Cost Center 3099		
21. Change Number 954111-VP		
22. Requested Completion Date 9-4-96		
23. Prescreen/Screen/USQD Number No USQD Required		
24. Independent Safety Review Meeting and Date None Required		
26. After obtaining ALL required signatures: Responsible Manager's Approval (print/sign/date) (Not required for New Procedures or Revisions) CM Vorkers 9/4/96		
27. Effective Date 9-4-96		
28. Expiration Date (if applicable) N/A		

REVIEWED FOR CLASSIFICATION/UCNI

By: *[Signature]*
Date: **09/04/96**

CONTROLLED COPY

Document Modification Request

Print or Type all information (except signatures). Process procedures in accordance with 1-A01-PROC DEV-400, Procedure Process.

25. DMR No.
95-DMR-001059

Original/Revised

1. Name/Phone/Page/Location CAMERON J. FREIBOTH / 2823 / D7550 / Bldg. 441			2. Date 08/22/95		
3. Existing Document Number and Revision 1-31000-COOP-001 Rev. 0			4. Document Type: <input checked="" type="checkbox"/> Procedure <input type="checkbox"/> Plan <input type="checkbox"/> Other		
5. Document Title Conduct of Operations					
6. Item	7. Page	8. Step	9. Proposed Modification		
1.	100		Change to read: To declare A USS operable, complete items 1-7.		
2.	100		MOVE 6 and 9 to After OM Approval and renumber 7 and 8.		
3.	82	5.4.12.2.4.2	Change to read: Complete Items 5-7 of Appendix 1 to declare the system operable.		
4.	82	NEW	Add step that says: Shift Manager: Complete Items 8 and 9 of Appendix 1 Once the Operations Manager has signed the Appendix		
5.	82	5.4.12.4.2	MOVE this step to After the Above New Step. and change to indicate that the operations manager will maintain records		
6.	1A/18	N/A	Update LOEP to new format and remove page 18. <i>with</i>		
10. Item					
10a. Justification (reason for modification, EJO #, TP #, etc.)					
1-5 To clarify use of Appendix 1.					
6 To accordance with 1-A01-PROC DEV-400. <i>initials</i>					

Original/Revised/Supervisory

11. <input checked="" type="checkbox"/> Process <input type="checkbox"/> Do not Process (state reason in Block 10a)	(print/sign/date) V.M. Pizzuto V.M. Pizzuto 08/22/95
--	---

12. <input checked="" type="checkbox"/> Process (Complete Blocks 13-22) <input type="checkbox"/> Do not Process (state reason in Block 10a)	(print/sign/date) V.M. Pizzuto V.M. Pizzuto 08/22/95	13. New Document/ Rev. No. (if new or changed)
--	---	--

Complete either Section 14a. or 14b., as applicable. For procedures, attach completed Procedure Modification Worksheet from 1-A01-PROC DEV-400.

14a. Type of Complete Modification		14b. Changes: (check all that apply.)		Additional Attributes:	
<input type="checkbox"/> New	<input type="checkbox"/> Revision	<input type="checkbox"/> Intent Change	<input checked="" type="checkbox"/> Non-Intent Change	<input type="checkbox"/> Temporary	<input type="checkbox"/> One-Time-Use
<input type="checkbox"/> One-Time-Use	<input type="checkbox"/> Cancellation	<input type="checkbox"/> Editorial Correction	<input type="checkbox"/> Regular	<input type="checkbox"/> Interim Approval Requested - Needed for Immediate Use (14-day limit for obtaining final approval)	<input type="checkbox"/> Limited Distribution

15. ERM Change Control Board Required: ☐ Yes ☐ No (Applicable only to new procedures, revisions, and intent changes.)

List the reviewing disciplines in Block 16. After concurrence has been obtained (in accordance with 1-A01-PROC DEV-400), enter the name of the reviewer followed by /s/ in block 17. If the reviewer indicates No comments, the review signature constitutes concurrence. Enter the date concurrence is obtained in Block 18.

16. Organization	17. Reviewer/Concurrence	18. Date	16a. Organization	17a. Reviewer/Concurrence	18a. Date
SNE	AMCMM for PFT 40TH	09/15/95			

19. Assigned SME/Phone/Page/Location C.J. FREIBOTH / 2823 / D7550 / Bldg. 441	20. Cost Center 3099	21. Change Number 981361-KH	22. Requested Completion Date
23. Prescreen/Screen/USOD Number Safety Evaluation not required.	24. Independent Safety Review Meeting and Date Independent Review not required.		
26. After obtaining ALL required signatures: Responsible Manager's Approval (print/sign/date) (Not required for New procedures or Revisions) V.M. Pizzuto / V.M. Pizzuto / 9/18/95			27. Effective Date 9/25/95
			28. Expiration Date (if applicable) N/A

DOCUMENT MODIFICATION REQUEST (DMR)

PAGE 1 OF 1

Refer to 1-A01-PPG-001 for Processing Instructions.
Print or Type All Information (Except Signatures).

1. Date

02/22/95

25.

DMR No. 95-DMR-000418

2. Existing Document Number/Revision

1-31000-COOP-001 Rev. 0

3. New Document Number or Document Number if it is to be changed with this Revision

N/A

4. Originator's Name/Phone/Pager/Location

Kathy Serafin 6278 /d3414 /Bldg.441

5. Document Title

Conduct of Operations

6. Document Type ☒ Procedure

7. Document Modification Type (Check only one)

☐ Other☐ New ☐ Revision ☒ Intent Change ☐ Nonintent Change ☐ Editorial Correction ☐ Cancellation

8. Item 9. Page 10. Step

11. Proposed Modifications

1. 81 5.4.12 Rewrite All of Section 5.4.12, and change section heading to: Returning Systems and Equipment to Service, and Operability Declaration.

ADD REFERENCES AS APPROPRIATE. 5/11/95

44
100

Add Appendix 1, System Return-to-Service and Operability Checklist.

5

3.

Add the following definition: Operable. A condition where a structure, system, or component can perform the intended function in the required manner upon demand.

RENUMBER STEPS AS APPROPRIATE. RP-5/13/95

2. Update List of Effective Pages, Table of Contents, and References, as applicable.

12. Justification (Reason for Modification, EJO #, TP #, etc.)

1. Incorporate 1-31000-COOP-019, Returning Systems and Equipment to Service, into 1-31000-COOP-001 in an attempt to streamline for necessary and sufficient standards.

2. Format in accordance with 1-A02-PPG-003, as applicable.

If modification is for a new procedure or a revision, list concurring disciplines in Block 13, and enter N/A in Blocks 14 and 15. If modification is for any type of change or a cancellation, organizations are listed in Block 13, then Concuror prints, and signs in Block 14, and dates in Block 15.

13. Organization	14. Print, Sign (if applicable)	15. Date (if applicable)
AS	W.D. Schenckman	3-9-95
BD	W.D. Schenckman	3/9/95
E&SS	T.P. Dawson	3/12/95
PA	W.D. Schenckman	3/18/95
SNM	W.D. Schenckman	3/18/95
WM	W.D. Schenckman	3-9-95
WS	K.P. Fennell for R.E. Fennell for R.C. Fennell	3/9/95

16. Originator's Supervisor (print/sign/date)

M. M. McDonald

17. Assigned SME/Phone/Pager/Location

Frank Gibbs

2786 / d6006 / T893B

18. Cost Center

3095

19. Charge Number

811230

20. Requested Completion Date

5/1/95

21. Effective Date

4-4-95

22. Accelerated Review?

Yes ☐ No ☒

23. ORC Review

G. #121212 4222 #50RC-95-015

24. Responsible Manager (print/sign/date)

M. M. McDonald

PADC-92-00628

CONTROLLED COPY

REVIEWED FOR CLASSIFICATION / UCNI

BY

DATE

12/30/94

23/07/95

4/10/95

DOCUMENT MODIFICATION REQUEST (DMR)

PAGE 1 of 1

Refer to 1-A01-PPG-001 for Processing Instructions.
Print or Type All Information (Except Signatures).

1. Date

1/4/95

25.

DMR No. 95-DMR-000023

2. Existing Document Number/Revision

-31000 - COOP-001 Rev. 0

3. New Document Number or Document Number if it is to be changed with this Revision

N/A

4. Author's Name/Phone/Pager/Location

S.M. Spitzer 7987/7330/130

5. Document Title

Conduct of Operations

6. Document Type

☒ Procedure☐ Other

7. Document Modification Type (Check only one)

☐ New☐ Revision☐ Intent Change☒ Nonintent Change☐ Editorial Correction☐ Cancellation

8. Item 9. Page 10. Step

11. Proposed Modifications

1

94

S.8.5

Delete " and DES-69, Labeling Facility System Components and Equipment " from the end of this paragraph.

12. Justification (Reason for Modification, EJO #, TP #, etc.)

DES-69 was cancelled and not replaced as of COEM Revision 45 dated 8/31/94, SX-164 contains all pertinent information

If modification is for a new procedure or a revision, list concerning disciplines in Block 13, and enter N/A in Blocks 14 and 15. If modification is for any type of change or a cancellation, organizations are listed in Block 13, then Concurror prints, and signs in Block 14, and dates in Block 15.

13. Organization

14. Print, Sign (if applicable)

15. Date (if applicable)

ESS

15/John W. Whiting for R.E.K.

1/12/95

SS

15/W.F. Mohr

1/10/95

16. Originator's Supervisor (print/sign/date)

W. Spitzer PWSPEYER 1/4/95

17. Author's Name/Phone/Pager/Location

S.M. Spitzer 7987/7330/130

18. Cost Center

3077

19. Charge Number

82011100

20. Requested Completion Date

21. Effective Date

3/22/95

22. Accelerated Review?

Yes ☐ No ☒

23. ORC Review

ORC Review not Required

24. Responsible Manager (print/sign/date)

DBB DB Branch 3/2/95

DOCUMENT MODIFICATION REQUEST (DMR)

PAGE 1 of _____

Refer to 1-A01-PPG-001 for Processing Instructions.
Print or Type All Information (Except Signatures).

1. Date 7/22/94		2. DMR No. 94-DMR-001411	
2. Existing Document Number/Revision 000-COOP-001, Rev 0		3. New Document Number or Document Number if it is to be changed with this Revision N/A	
4. Originator's Name/Phone/Pager/Location R. S. Badgett, X2877, D5086, Bldg. 750		5. Document Title Conduct of Operations	
6. Document Type <input checked="" type="checkbox"/> Procedure <input type="checkbox"/> Other		7. Document Modification Type (Check only one) <input type="checkbox"/> New <input type="checkbox"/> Revision <input type="checkbox"/> Intent Change <input checked="" type="checkbox"/> Nonintent Change <input type="checkbox"/> Editorial Correction <input type="checkbox"/> Cancellation	
8. Item	9. Page	10. Step	11. Proposed Modifications
1	92	5.7.4.8	Change to read: Procedure changes and revisions, if required, for temporary or permanent facility modifications, are implemented when returning the system/equipment to service or operability. The Building Operations Manager ensures new or revised procedures, designated as required for Return to Service, have been received.
12. Justification (Reason for Modification, EJO #, TP #, etc.) This change makes COOP-001 match the wording in COOP 19 para 5.3, COOP-21 para 3.2, IWCP-3 para 5.7, CCCP-3-16 para 4.1, and Eng. Dir. 92-003 para 4.1.4.6			
13. Organization			
14. Print, Sign (if applicable)			
15. Date (if applicable)			
Bldg 707	A. J. Holifield, Jr.		7/25/94
E&S	D. P. Snyder, II		7/25/94
16. Originator's Supervisor (print/signature) V. M. Pizzuto			
17. Approving SME/Phone/Pager/Location S. Badgett, X2877/D5086/B750			
18. Cost Center 0483		19. Charge Number 90360700	20. Requested Completion Date 8/12/94
21. Effective Date 8/26/94			
22. Original Reviewer? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
23. ORC Review Not Required			
24. Records Manager (print/signature) D. B. Branch			

PADC-92-00628

REVIEWED FOR CLASSIFICATION / UCHN

BY W. K. Fero 11/NUDATE 7/26/94

DOCUMENT MODIFICATION REQUEST (DMR)

PAGE 1 of 2

Refer to 1-A01-PPG-001 for Processing Instructions.
Print or Type All Information (Except Signatures).

1. Date 07/21/93	2. DMR No. 93-DMR-000355
3. Existing Document Number/Revision 1-31000-COOP-001, Rev. 0	
4. New Document Number or Document Number if it is to be changed with this Revision N/A	
5. Document Title Conduct of Operations	

6. Document Type <input checked="" type="checkbox"/> Procedure <input type="checkbox"/> Other	7. Document Modification Type (Check only one) <input type="checkbox"/> New <input type="checkbox"/> Revision <input checked="" type="checkbox"/> Intent Change <input type="checkbox"/> Nonintent Change <input type="checkbox"/> Editorial Correction <input type="checkbox"/> Cancellation
---	--

8. Item	9. Page	10. Step	11. Proposed Modifications
1	1A		Add list of effective pages.
2	2-3		Corrected to reflect changes. Delete Appendix 1.
3	4-5	2.3.1-2.4.3	Delete reference to Appendix 1.
4	6	3.4-3.7	Add definitions of procedure use categories.
5	7	4.3.2	Change paragraph reference.
6	8	4.4.1.12	Add responsibility for conduct of operations implementation plan.
7	31	5.1.6.8(3)	Change procedure entry.

12. Justification (Reason for Modification, EJO's, TP's, etc.)

1. To comply with new PPG requirements.
2. Appendix 1 proved to be impractical and not cost effective in its approach.
3. Same comment as 2.
4. Adds new information from new PPG requirements to enhance COOP users abilities and understanding.
5. Same comment as 2.

In lieu of Appendix 1, emphasizes management responsibility for COOP implementation.
To reflect recently released procedure name and number change.

If modification is for a new procedure or a revision list concerning disciplines in Block 13, and enter N/A in Blocks 14 and 15. If modification is for any type of change or a cancellation, organizations are listed in Block 13, then Concurator prints, and signs in Block 14, and dates in Block 15.

13. Organization	14. Print, Sign (if applicable)	15. Date (if applicable)
A & P	/s/ J. H. Breen for	8/17/93
E & T	/s/ H. S. Berman	8/17/93
ERM	/s/ H. M. Hutchins	8/24/93
E & WM	/s/ T. A. Redani	8/30/93
FM & O	/s/ W. A. Kirby	8/31/93
M & PS	/s/ D. W. Ferrera	
PRT	/s/ R. W. Kuster	8/27/93
SS & S	/s/ J. H. Kilci	
SA & A	/s/ J. G. Davis	
TM	/s/ T. M. Francis	8/12/93

16. Originator's Supervisor (print sign/date) S. V. [Signature] 9/1/93				
17. Assigned SME (Print/Sign/Location) R. M. Szozda, X6536, d7413, Bldg. 771	18. Core Center 488	19. Change Number 95102901	20. Requested Completion Date 9/1/93	21. Effective Date 9/17/93
22. Accelerated Review? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				
23. ORC Review SORC # 193-70 9/7/93				
24. Responsible Manager (print, sign, date) V. [Signature] 9/7/93				

REVIEWED FOR CLASSIFICATION / UCM

BY J. V. CONYERS (VVV)

DATE 8/14/93

Refer to 1-A01-PPG-001 for Processing Instructions.
Print or Type All Information (Except Signatures).

25. DMR No. 93-DMR-000355

2 or 3. Document Number/Revision 1-31000-COOP-001, Rev. 0			5. Document Title Conduct of Operations	
n	9. Page	10. Step	11. Proposed Modifications	
8	37	5.1.13	Add Conduct of Operations Implementation Plan	
9	37A		Page added to accommodate insertion on prior page.	
10	46-47	5.3.2.4.1- 5.3.2.4.7	Correct procedure use category information	
11	81-83	5.4.12	Delete details and add reference to 1-31000-COOP-019, Returning Systems and Equipment to Service.	
12	90	5.7.3.2	Add reference to PPG-001, 003, 004, procedure preparation program procedures.	
13	94	5.9	Add Operational Safety Requirements (OSR) Revision Implementation Plans.	
14	97	7.29,34, 35,36	Change procedure entries.	
15	100- 105		Appendix 1 deleted.	
<p>12. Justification (Reason for Modification)</p> <p>8. Same comment as 6. 9. Same comment as 6. 10. Same comment as 4. 11. To accommodate DOE RFO memo CED:EB:DMP:04439, APR 23 93, to eliminate duplicate requirements from other COOPs. 12. Same comment as 4. 13. To add instructions for management to implement OSR revisions in response to DOE ORR 707 OBS-11. 14. Same comment as 7. 15. Same comment as 2.</p>				

PROCEDURE CHANGE NOTICE (PCN)

Page 1 of

PCN No. 93-PCN-000285

Refer to 1-11000-PAPG-002 for instructions.

PRINT only type information (except signatures).

1. Originator Name No./Location
R/ Bailey.X4581/Block 100 ES

2. Date
04/21/93

3. Cost Center
415

4. Procedure Number/Revision Level
1-31000-COOP-001/ Rev. 0

5. Procedure Title
Conduct of Operations

6. Procedure Change Type
☒ Major
☐ Minor

7. Duration
☒ Permanent
☐ Temporary
Expiration Date

8. Charge Number
820111

9. Page Step or Section Proposed Changes

69 5.4.5.2 Should read:
The RFP Plant Policy 9-10 calls for a Configuration Change Control Program (CCCP) which provides an integrated quality management work control process that uses a systematic, graded approach for controlling all changes to the configuration of facilities, systems, processes, safety related software, and site grounds. This process ensures modifications are within scope and budget, technically appropriate and safely executed, and that configuration documents are accurately updated, all in accordance with appropriate DOE and industry consensus standards. The Conduct of Engineering Manual (COEM), Integrated Work Control Program (IWCP), and Conduct of Maintenance (COM) integrate with CCCP to ensure consistency of plant configuration changes.

70 5.4.5.4 Should read:
Use the RFP IWCP, and COEM manuals which are invoked by CCCP, for all modifications to the RFP facility configuration.

~~70 5.4.5.5 Include this note:~~ *5/12/93* NOTE

~~The Temporary modification process will be moved to the COOP manual by 10-1-93.~~ *5/12/93*

(Use RF-47636A PCN CONTINUATION SHEET, for additional space)

10. Justification (Reason for Change)

Required to update procedure to reflect current program and policy description.

11. Supervisor (signature/date)

W. Spryer 4/21/93

12. Affects Plant Safety?

☒ YES ☒ NO

13. Procedure Use Category

☒ 1 ☐ 2 ☒ 4

14. Concurrence Organization

Signature

Date

14. Concurrence Organization

Signature

Date

A&P /s/ G. E. MARX 4/28/93

E&T /s/ H. S. BERMAN 4/30/93

ERM /s/M.C.Broussard for R.L.Beneditti 4/29/93

E&WM /s/ G. L. Potter for T. G. H. 4/20/93

FM&O /s/ W. A. KIRBY 4/30/93

ORC *6/8/93* *Don R. Panton* 6/8/93

M&PS /s/ D. W. FERRERA 4/30/93

SA&A /s/ L. C. Smith for J. G. DAVIS 5/10/93

SS&S /s/ J. H. Riley 5/3/93

15. Responsible Manager (signature/date)

W. Spryer 5/12/93

16. Effective Date

6/8/93

RF-47636 (Rev 10/91)

REVIEWED FOR CLASSIFICATION

BY *JN CONYERS* (UNU)

DATE 5/4/93

PADC-92-00628

CONTROLLED COPY

PROCEDURE CHANGE NOTICE (PCN)

Refer to 1-11000-PAPG-001 or 1-11000-PAPG-002 for instructions.

PRINT or TYPE all information (except signatures).

Page 1 of 1

PCN No. 93-PCN-000270

1. Originator/Phone No./Location J. O. Perrine / 6621 / T130H		2. Date 4/14/93	3. Cost Center 284
4. Procedure Number/Revision Level 1-31000-COOP-001 / Rev 0		5. Procedure Title Conduct of Operations	
6. Procedure Change Type <input type="checkbox"/> Major <input checked="" type="checkbox"/> Minor		7. Duration <input checked="" type="checkbox"/> Permanent <input type="checkbox"/> Temporary Expiration Date	8. Charge Number 82014100
9. Page	Step or Section	Proposed Changes	
46	5.3.2.4.1	Change to read " When an activity is being performed in accordance with a use category 1 procedure, a working or controlled copy is in the possession of the user and the Instructions Section is followed step by step. When Stand-alone Instructions sections are used within the Instructions Section, they are <u>not</u> independent of the other major sections of the procedure."	

(Use RF-47536A PCN CONTINUATION SHEET, for additional space)

10. Justification (Reason for Change)
This change will clarify use category 1 procedure performance and will satisfy a DOE concern from procedure walkdowns.

11. Supervisor (signature/date) <i>Steve Peterson</i> 4/14/93		12. Affects Plant Safety? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	13. Procedure Use Category <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3
14. Concurrence Organization	Signature	Date	14. Concurrence Organization
A&P	/s/ G. E. MARX	4/19/93	M&PS
E&T	/s/ H. S. BERMAN	4/20/93	SA&A
ERM	/s/ R. L. BENEDETTI	4/19/93	SS&S
E&WM	/s/ T. G. HEDAH	4/20/93	
FM&O	/s/ W. A. KIRBY	4/23/93	
ORC	<i>Mark [signature]</i>	5/17/93	
15. Responsible Manager (signature/date) <i>[signature]</i> 5/3/93		16. Effective Date 5/18/93	

RF-47536 (Rev 10/91)

REVIEWED FOR CLASSIFICATION

BY *H. S. Hyatt* 4-14-93

DATE 4-14-93

PADC-92-00628

CONTROLLED COPY

Rocky Flats Plant

1-31000-COOP-001

REVISION 0

CONDUCT OF OPERATIONS

APPROVED BY: *J. R. Zane* 16/30/92 Responsible Organization Plutonium Production
 General Manager, Date
 Rocky Flats Plant

Effective Date: 07/15/92

CONCURRENCE:

<u><i>L. E. Manc</i></u> <u>16/24/92</u> Associate General Manager, Administration and Planning	<u><i>H. S. Bernum</i></u> <u>16/26/92</u> Assistant General Manager, Engineering
<u><i>[Signature]</i></u> <u>16/24/92</u> Associate General Manager, Environmental and Waste Management	<u><i>R. C. Conlon</i></u> <u>16-26-92</u> Assistant General Manager, Health and Safety
<u><i>K. G. Tallman</i></u> <u>16/26/92</u> Assistant General Manager, Non-Plutonium Operations	<u><i>[Signature]</i></u> <u>16/27/92</u> Assistant General Manager, Performance Assurance
<u><i>[Signature]</i></u> <u>16/26/92</u> Assistant General Manager, Performance-Based Training	<u><i>V. M. Pizzaro</i></u> <u>6/26/92</u> Assistant General Manager, Plutonium Production
<u><i>[Signature]</i></u> <u>16/26/92</u> Assistant General Manager, Plutonium Recovery	<u><i>[Signature]</i></u> <u>6/30/92</u> Assistant General Manager, Program and Project Management
<u><i>W. A. Kirby</i></u> <u>6/26/92</u> Assistant General Manager, Quality Assurance	<u><i>W. H. Gurdian for MTS</i></u> <u>16/16/92</u> Assistant General Manager, Radiation Protection
<u><i>D. W. Farnum</i></u> <u>6/29/92</u> Assistant General Manager, Technical Support	<u><i>[Signature]</i></u> <u>6/30/92</u> Subject Matter Expert
<u><i>Mark Joseph</i></u> <u>16/30/92</u> Operations Review Committee Chairman	

AFFECTS PLANT SAFETY PROCEDURE USE CATEGORY 3

The following PRRs have been incorporated in this revision:

PRR-000222 92-PRR-000225
 PRR-000223 92-PRR-000280
 92-PRR-000224 92-PRR-000551

This procedure supersedes procedure COOP-1, Revision 1.

PADC-92-00628

CONTROLLED
COPY

Reviewed for Classification

By *P. F. Kolla* (uvu)
 Date 6/30/92

LIST OF EFFECTIVE PAGES

<u>Pages</u>	<u>Effective Date</u>	<u>Pages</u>	<u>Effective Date</u>
1	07/15/92		
1A	04/25/97		
2	05/01/95		
3	04/25/97		
4	09/17/93		
5-6	05/01/95		
7-8	09/17/93		
9-30	07/15/92		
31	09/17/93		
32-36	07/15/92		
37-37A	09/17/93		
38-45	07/15/92		
46	09/17/93		
46A-47	09/17/93		
48-68	07/15/92		
69-70	06/08/93		
71-74	07/15/92		
75-76	09/04/96		
77-80	07/15/92		
81-82	04/25/97		
83	09/17/93		
84-89	07/15/92		
90	09/17/93		
91	07/15/92		
92	08/26/94		
93	07/15/92		
94	03/22/95		
94A-94C	09/17/93		
95-96	07/15/92		
97	09/17/93		
98	07/15/92		
99	05/01/95		
100	04/25/97		
101-105	09/17/93		

The following DMRs for change are active for this procedure:

97-DMR-000279
96-DMR-000790
95-DMR-001059
95-DMR-000418
95-DMR-001411
95-DMR-000023
93-DMR-000355
93-PCN-000285
93-PCN-000270

TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
	TITLE	1
	TABLE OF CONTENTS	2
1.	PURPOSE	4
2.	SCOPE	4
3.	DEFINITIONS	6
4.	RESPONSIBILITIES	6
4.1	General Manager (GM)	6
4.2	Associate/Assistant General Manager (AGM), Plutonium Production	6
4.3	Associate/Assistant General Managers	7
4.4	Operations Manager	7
4.5	Shift Manager	12
4.6	Supervision	16
4.7	Shift Technical Advisor	19
4.8	Operations and Support Personnel	21
5.	INSTRUCTIONS	24
5.1	Conduct of Operations	24
5.1.1	Management Expectations and Involvement	24
5.1.2	Commitment to Excellence	25
5.1.3	Professionalism	27
5.1.4	Fitness for Duty	28
5.1.5	Operations Teamwork	29
5.1.6	Self Evaluation	29
5.1.7	Planning for Safety	31
5.1.8	Defense in Depth Philosophy	32
5.1.9	Criticality and Operational Safety Limits	33
5.1.10	Safety, Environment, and Operating Goals	34
5.1.11	Control of Systems and Activities	35
5.1.12	Delegation of Authority	36
5.1.13	Conduct of Operations Implementation Plan	37
5.2	Staffing and Training	37
5.2.1	Building and Shift Complement	37
5.2.2	Overtime Requirements and Restrictions	39
5.2.3	Staff Training and Shift Training Requirements	40

93-DMR-000355

TABLE OF CONTENTS (continued)

<u>Section</u>		<u>Page</u>
5.3	Shift Routines and Operating Practices.....	45
5.3.1	General	45
5.3.2	Use of Instructions, Procedures, and Drawings	46
5.3.3	Formality of Shift Operations	51
5.3.4	Shift Relief and Turnover.....	58
5.3.5	Shift, Standing, and Operations Orders.....	59
5.3.6	Communications Criteria	60
5.3.7	Control and Use of Operator Aids.....	60
5.3.8	Operator Rounds.....	61
5.3.9	Internal Surveillance.....	62
5.4	Maintaining and Controlling System Operability.....	62
5.4.1	General.....	62
5.4.2	System and Equipment Operation	62
5.4.3	Response to Alarms	63
5.4.4	Response to Indications.....	67
5.4.5	Configuration Control.....	69
5.4.6	Off Normal Conditions	70
5.4.7	Compliance with Operating Limits	71
5.4.8	Lockout and Tagout.....	77
5.4.9	Caution Tags.....	77
5.4.10	Work Authorization	78
5.4.11	Removing Systems and Equipment from Service	78
5.4.12	81
5.4.13	Resetting Protective Devices	83
5.4.14	Independent Verification Criteria and Requirements	84
5.4.15	Vital Safety Systems Status Control.....	85
5.5	Control and Maintenance Requirements for Operating Area Logs	85
5.6	Abnormal Events and Notifications.....	85
5.6.1	General.....	85
5.6.2	Occurrence Reporting	86
5.6.3	Occurrence Investigation and Corrective Action	86
5.7	Development and Control of Operating Procedures.....	87
5.7.1	Role of Procedures	87
5.7.2	Procedure Control Program Scope	88
5.7.3	Procedure Control Requirements	89
5.7.4	Procedure Revisions and Changes	91
5.7.5	Temporary Procedures.....	92
5.7.6	Periodic Review and Improvement Program.....	93
5.8	Component Labeling.....	94
5.9	Operational Safety Requirements (OSR) Revision	
	Implementation Plan	94A
6.	RECORDS	94C
7.	REFERENCES.....	95

1. PURPOSE

- 1.1 This procedure provides requirements, guidelines, and instructions to ensure that operations and support activities are conducted in a manner consistent with Rocky Flats Plant (RFP) goals, objectives, and approved procedures.
- 1.2 This procedure implements requirements of Department of Energy (DOE) Order 5480.19, Conduct of Operations Requirements for DOE Facilities.

2. SCOPE

- 2.1 This procedure defines the Conduct of Operations program and interfaces that comply with applicable DOE orders; federal, state, or local laws, orders, or regulations. Any identified conflicts are reported to operations management using the supervisory progression of the individual identifying the conflict. Until the conflict is resolved, the higher order directive has precedence.
- 2.2 This procedure applies to activities and functions performed by RFP operations organizations and to associated support activities provided by other RFP organizations. Operations activities and functions are also performed in accordance with the requirements of the RFP Quality Assurance program.
- 2.3 The degree to which the Conduct of Operations Manual is applied is determined using a graded approach commensurate with each organization's programmatic importance and associated potential for safety, health, and environmental impact.

93-DNR-000355

93-DMR-000355

- 2.4 When guidelines or requirements defined in this procedure, or procedures referenced within, do not provide adequate detail for direct implementation, each affected operations organization develops implementing procedures that provide the needed level of detail. However, these implementing procedures are to be consistent with the intent of this procedure, DOE Order 5480.19, and other applicable orders, requirements, and procedures.

95-DMR-000418

3. DEFINITIONS

- 3.1 **Operable**. A condition where a structure, system, or component can perform the intended function in the required manner upon demand.
- 3.2 **Out of Commission (OOC)**. The equipment or system is not required to support the current mission of a facility and is not expected to be returned to operation.
- 3.3 **Out of Service (OOS)**. The equipment or system is required to support the current mission by a facility and cannot, or should not, be operated under any circumstances until corrective maintenance is completed.
- 3.4 **Shift Technical Advisor (STA)**. Position assigned to specific RFP buildings on a case by case basis to provide technical assistance and counsel to operations personnel. OMs at buildings without STAs may assign similar duties to other individuals.

93-DMR-000355

- 3.5 **Procedure Use Category 1**. Use Category 1 indicates that the procedure must be in the possession of the performer, or a designated procedure reader, and each step of the procedure is performed as written. Either the tasks are complex in nature and are not routinely performed; or the consequences of improper action during the performance of the tasks could have a significant adverse impact on personal health or safety, plant security, the environment, or equipment.

93-DMR-000355

- 3.6 **Procedure Use Category 2.** Use Category 2 indicates that the tasks in the procedure require immediate or prompt action and time constraints may prohibit the procedure being in hand during the performance of the initial steps, even though failure to perform these tasks correctly may have significant consequences.
- 3.7 **Procedure Use Category 3.** Use Category 3 indicates that the procedure need not be in hand for the performance of the described task, because the tasks are simple or routine, and failure to perform each step in sequence will not have a significant adverse impact on personal health or safety, plant security, the environment, or equipment.
- 3.8 **Procedure Use Category 4.** Use Category 4 is used for procedures that do not meet the requirements for Categories 1, 2, or 3.

4. RESPONSIBILITIES

4.1 **General Manager (GM)**

- 4.1.1 Maintains responsibility for overall operation of the RFP.
- 4.1.2 Approves all procedures in the RFP Conduct of Operations Manual.

4.2 **Associate/Assistant General Manager (AGM), Plutonium Production**

- 4.2.1 Sponsors the RFP Conduct of Operations Manual.
- 4.2.2 Defines, develops, and maintains required Conduct of Operations Manual documents.

4.3 Associate/Assistant General Managers

4.3.1 Ensure training and implementation of the Conduct of Operations Manual as it applies to their area of responsibilities.

4.3.2 Ensure development of additional implementing procedures in accordance with the requirements of paragraph 2.4.

4.4 Operations Manager

4.4.1 **General Responsibilities**

4.4.1.1 Ensures safe and proper supervision, monitoring, operation, and maintenance of assigned buildings, systems, and areas.

4.4.1.2 Maintains authority over tenant organizations working in respective facilities for scheduling of tasks, allocations of resources, and compliance with Conduct of Operations Manual requirements.

4.4.1.3 Acts on all problems, occurrences, emergencies, and other matters affecting the respective facilities including curtailing or suspending operations when undue risks to health, safety, or the environment are identified.

4.4.1.4 Acts as swiftly as possible to:

- (1) Make the appropriate response to problems arising from any source in the assigned facilities.
- (2) Ensure that appropriate response personnel are notified.
- (3) Inform senior management.

93-DMR-000355

- 93-DMR-000355
- 4.4.1.5 Maintains clear lines of communication with each function in the assigned facilities.
 - 4.4.1.6 Provides a work environment that is conducive to excellence, professionalism, and teamwork at all levels.
 - 4.4.1.7 Establishes and maintains safety and security teams and provides appropriate facility access controls.
 - 4.4.1.8 Approves all facility operating procedures.
 - 4.4.1.9 Ensures control of facility visitors.
 - 4.4.1.10 Proactively seeks ways to improve safety performance.
 - 4.4.1.11 Ensures good housekeeping practices are used throughout plant facilities.
 - 4.4.1.12 Develops a Conduct of Operations Implementation Plan to achieve compliance with the Conduct of Operations Program.
 - 4.4.1.13 Develops an OSR Revision Implementation Plan to ensure appropriate implementation of revisions to OSRs.

4.4.2 **Facility Productivity and Capability Responsibilities**

- 4.4.2.1 Provides management, operational direction, and technical input; serves as the single point of authority; and interacts with all management levels and service organizations as necessary to maintain the highest possible productivity consistent with:
 - (1) Using facility designed functions and resources effectively.
 - (2) Minimizing costs.
 - (3) Meeting safety, security, environmental, and other applicable requirements.

4.4.2.2 Schedules and integrates the activities of Maintenance, Construction, Health and Safety, Engineering, Security, Fire Protection, Utilities, Operations, and other functions as necessary to maintain facility control and to minimize work flow interruptions.

4.4.2.3 Develops and executes staffing plans that reflect anticipated personnel losses or needs as required by facility schedules.

4.4.2.4 Reviews operations activities to assess the overall effectiveness and efficiency in using plant resources.

4.4.3 **Compliance with Requirements Responsibilities**

4.4.3.1 Implements RFP functional programs to include but not limited to the following for assigned facility:

- (1) Operations
- (2) Maintenance
- (3) Emergency Preparedness
- (4) Fire Protection
- (5) Nuclear Safety
- (6) Occurrence Reporting
- (7) Quality Assurance
- (8) Lessons Learned
- (9) Safeguards and Security
- (10) Training
- (11) Radiation Protection
- (12) Waste Management
- (13) Configuration Management

4.4.3.1 (continued)

- (14) Engineering**
- (15) Information Management**
- (16) Self Assessment**
- (17) Industrial Health and Safety**

4.4.3.2 Ensures enforcement of RFP policies and rules.

4.4.3.3 Ensures that all operations are performed in accordance with Safety Limits (SLs), Operational Safety Requirements (OSRs), and approved procedures.

4.4.3.4 Maintains oversight of all operations to assess achievement of operating goals and to ensure compliance to policies, procedures, and standing orders while emphasizing safety.

4.4.3.5 Identifies and appropriately reports instances of noncompliance and takes appropriate action.

4.4.4 Facility Changes Responsibilities

4.4.4.1 Coordinates and oversees physical changes to the assigned facilities to ensure that applicable safety, environmental, and security requirements are met.

4.4.4.2 Maintains liaison with Facilities Project Management concerning improvements planned for the facility.

4.4.4.3 Approves temporary and permanent facility modifications and ensures proper coordination of any construction activity.

4.4.4.4 Plans for proper staffing and changeover to new process facilities.

4.4.5 Personnel Responsibilities

- 4.4.5.1 Ensures that operations personnel possess the necessary knowledge and experience to understand RFP activities, systems, and the potential for associated safety related events.
- 4.4.5.2 Ensures that facility personnel are trained and qualified to meet RFP standards.
- 4.4.5.3 Provides direction and guidance to achieve and ensure the proper training and qualification of employees in accordance with applicable policies.
- 4.4.5.4 Ensures that all employees conform to safety requirements of their jobs through familiarity with applicable policies, requirements, and procedures related to safety.
- 4.4.5.5 Ensures that Performance Appraisals and Promotions include an assessment of operating and safety performance.

4.4.6 Abnormal and Emergency Situations Responsibilities

- 4.4.6.1 Complies with the RFP Emergency Plan.
- 4.4.6.2 Notifies the Shift Manager (SM) promptly.
- 4.4.6.3 Acts as the central decision making point.
- 4.4.6.4 Maintains full responsibility to direct local response on all shifts.
- 4.4.6.5 Coordinates with appropriate personnel for any required offsite assistance and resources.

4.5 Shift Manager

NOTE

OMs of buildings without an SM may assign SM responsibilities identified in this subsection to other individuals.

4.5.1 General Responsibilities

- 4.5.1.1 Ensures that operations are conducted and facilities are operated in accordance with the Conduct of Operations Manual.
- 4.5.1.2 Reports directly to the OM, Assistant Operations Manager, or other manager as designated in a shift order by the OM.
- 4.5.1.3 Maintains authority over, and responsibility for, all facility operations occurring on shift including activities performed by tenant organizations.
- 4.5.1.4 Acts as swiftly as possible to:
 - (1) Make the appropriate response to problems arising from any source in the assigned facilities.
 - (2) Ensure that appropriate response personnel are notified.
 - (3) Inform senior management.
- 4.5.1.5 Maintains clear lines of communication with management and operations personnel in assigned facilities.
- 4.5.1.6 Provides written authorization for shift activities, including maintenance activities, which affect Vital Safety Systems (VSS) equipment, operations, or changes control indications or alarms.

4.5.1.7 Specifies to operations personnel those activities that may be performed without informing the SM.

4.5.1.8 Notifies senior management if any individual bypasses or overrules his operational judgement.

4.5.1.9 Ensures control of facility visitors during the shift.

4.5.2 Abnormal and Emergency Situations Responsibilities

4.5.2.1 Determines appropriate operating conditions, system alignments, or equipment manipulations.

4.5.2.2 Approves all nonroutine operation of equipment within limits identified.

4.5.2.3 Informs the OM or Assistant Operations Manager in a timely manner of any abnormal event occurring during the shift.

4.5.2.4 Performs abnormal event investigations and reports results in accordance with established procedures.

4.5.2.5 Directs emergency response on shift until relieved by higher management authority.

4.5.2.6 Identifies and categorizes occurrences, initiates emergency notifications, and supports emergency response in accordance with the Rocky Flats Facilities Emergency Plan for assigned facilities.

4.5.3 Shift Personnel Responsibilities

- 4.5.3.1 Ensures that the shift is properly manned for safe and efficient operations and activates additional personnel as required, with the OM's approval.
- 4.5.3.2 Determines personnel duties for the shift as directed by the Plan of the Day (POD) and operational requirements.
- 4.5.3.3 Periodically reviews radiation exposure trends of operations personnel to keep exposures As Low As Reasonably Achievable (ALARA) by identifying and minimizing adverse factors.
- 4.5.3.4 Ensures that work stations do not contain any entertainment devices or materials unrelated to operations.
- 4.5.3.5 Ensures that operations personnel are attentive and responsive to operating parameters.

4.5.4 Compliance with Requirements Responsibilities

- 4.5.4.1 Ensures that operations are conducted safely and in accordance with applicable procedures, OSRs, and sound operating practices.
- 4.5.4.2 Ensures enforcement of RFP policies and rules.
- 4.5.4.3 Reviews and ensures compliance with scheduled Safety Reviews (SRs).
- 4.5.4.4 When Limiting Conditions for Operations (LCO) surveillance requirements or acceptance criteria are not met, ensures the initiation of specified remedial actions.

4.5.4.5 Maintains awareness of all existing LCO deficiencies, complies with related OSRs, and ensures that corrective actions are being taken.

4.5.4.6 Identifies and reports items of noncompliance.

4.5.5 Facility Status and Shift Responsibilities

4.5.5.1 At least once per shift:

4.5.5.1.1 Tours the facility to observe equipment and operating status, activities, and conditions including area housekeeping.

4.5.5.1.2 Walks down the control rooms and panels to determine the status of equipment important to safety before or shortly after shift turnover.

4.5.5.1.3 Reviews shift round inspection sheets and appropriate logs to ensure accuracy and adequacy.

4.5.5.2 Monitors and controls maintenance activities conducted according to the POD.

4.5.5.3 Approves all operational changes and communicates to operations supervisors and personnel.

4.5.5.4 Maintains proper configuration and authorizes status changes to major equipment and systems.

4.5.5.5 Maintains awareness of utilities changes by granting approval for these changes.

- 4.5.5.6 Ensures that system status boards are updated to reflect changes made during the shift to facility conditions and equipment status.
- 4.5.5.7 Ensures that crew briefings and pre-evolution briefings are conducted for shift activities, status, and other matters.
- 4.5.5.8 Annotates on the master copy of the POD, before the end of each shift, the status of all scheduled shift activities including changes to the OOS and OOC lists.
- 4.5.5.9 Ensures LCO deficiencies are logged on the System Status Board and included in shift turnover briefings.
- 4.5.5.10 Ensures VSS configuration changes are reflected on VSS status control boards.
- 4.5.5.11 Ensures duties are transferred only through formal turnover to a qualified relief using appropriate turnover checklists.

4.6 Supervision

4.6.1 **General Responsibilities**

- 4.6.1.1 Ensures that activities performed are authorized by the OM responsible for the applicable building, system, and area.
- 4.6.1.2 Provides direction to operators, technicians, and other working level personnel below the SM level, including foremen.
- 4.6.1.3 Ensures the safety of all subordinate personnel, assigned activities, and facilities.

- 4.6.1.4 Ensures that operations are conducted safely and in accordance with applicable procedures, OSRs, and sound operating practices.
- 4.6.1.5 Promotes professionalism and commitment to achieving excellence as a part of the daily routine.
- 4.6.1.6 Promptly informs SM of the satisfactory or unsatisfactory completion of tests, surveillances, or procedures performed.
- 4.6.1.7 Provides information, direction, and guidance to subordinates to ensure that work is accomplished safely, efficiently, reliably, and in accordance with applicable schedules and specifications.
- 4.6.1.8 Obtains appropriate approvals for operating or administrative changes affecting safe, efficient, and reliable operation.
- 4.6.1.9 Acts as swiftly as possible to:
 - (1) Make the appropriate response to problems arising from any source in the assigned facilities.
 - (2) Ensure that appropriate response personnel are notified.
 - (3) Inform senior management.
- 4.6.1.10 Maintains clear lines of communication with management and subordinate personnel in the assigned facilities.
- 4.6.1.11 Ensures that subordinate personnel read and understand applicable requirements, orders, procedures, and practices prior to use.

4.6.1.12 Promotes good housekeeping by periodically inspecting assigned areas.

4.6.2 **Physical, Administrative, or Procedural Deficiencies Responsibilities**

4.6.2.1 Routinely observes personnel performing operations activities to improve performance by identifying and correcting deficiencies.

4.6.2.2 Identifies and reports items of noncompliance.

4.6.2.3 When deficiencies are detected:

4.6.2.3.1 Performs an initial operability determination for the system, component or equipment affected by the deficiency.

4.6.2.3.2 Stops operations and places equipment in a safe condition when required.

4.6.2.3.3 Notifies the SM and appropriate line manager.

4.6.2.3.4 Takes measures to initiate documentation, evaluation, and correction of the deficiency in accordance with the Integrated Work Control Program (IWCP) Manual.

4.6.3 **Shift Personnel Responsibilities**

4.6.3.1 Ensures that subordinate personnel are trained and qualified for their assigned duties.

4.6.3.2 Controls personnel radiation exposures ALARA.

- 4.6.3.3 Ensures that no on-duty operations personnel have or use at their work stations any entertainment devices or written material that does not relate to operations.

4.6.4 **Facility Status and Shift Responsibilities**

- 4.6.4.1 Maintains awareness and keeps SM and subordinates informed of equipment status and conditions.
- 4.6.4.2 Walks down control rooms, panels, and equipment within their assigned areas to determine status before or shortly after shift turnover.
- 4.6.4.3 Maintains assigned equipment and area logs as designated by OM.
- 4.6.4.4 Ensures duties are transferred only through formal turnover to a qualified relief.

4.7 **Shift Technical Advisor**

NOTES

1. *STAs are assigned to specific RFP buildings on a case by case basis.*
2. *OMs of buildings without requirements for STAs may assign the STA responsibilities identified in this subsection to other individuals.*

4.7.1 **General Responsibilities**

- 4.7.1.1 The STA reports only to the applicable OM.
- 4.7.1.2 Provides on-shift advice and counsel to shift operations personnel to help determine cause and mitigation of facility accidents.

4.7.1.3 Provides technical assistance to SMs and other operations personnel.

4.7.1.4 Evaluates the implementation, use, and effectiveness of plant instructions and procedures and makes appropriate recommendations for changes.

4.7.2 Safety Monitoring Responsibilities

4.7.2.1 Evaluates facility operations and advises management in correcting conditions that might compromise the safety of operations.

4.7.2.2 Performs safety monitoring activities to ensure that:

- (1) Applicable operational and safety procedures are followed.
- (2) Technical, operational, and safety concerns (personnel and equipment) are addressed and resolved in a timely manner.
- (3) Line management is cognizant of, and in continuing compliance with, the OSR.
- (4) Items of nonconformance are identified and appropriate actions are initiated.

4.7.2.3 If an unsafe condition or practice is occurring, stops operations and directs that equipment be placed in a safe and stable condition.

4.7.2.4 Performs a review of planned activities for the upcoming shift and, based on independent evaluations, ensures that special considerations and precautions are technically correct and sufficient for safe operations.

- 4.7.2.5 Independently evaluates corrective actions for safety problems, as proposed and implemented by line management, to ensure safety and technical adequacy.

- 4.7.3 **Abnormal and Emergency Situations Responsibilities**

- 4.7.3.1 Ensures that appropriate management personnel are informed.
- 4.7.3.2 Ensures that proper occurrence and emergency notifications are made.
- 4.7.3.3 Independently, on a real time basis, investigates the cause(s), assesses any associated adverse effects, and recommends changes to procedures or equipment as necessary to prevent recurrence.
- 4.7.3.4 Provides technical guidance and support to line management.
- 4.7.3.5 Evaluates actions, planned or taken, to place equipment in a safe and stable condition that minimize the impact of the occurrence or unplanned events.

- 4.8 **Operations and Support Personnel**

- 4.8.1 **General Responsibilities**

- 4.8.1.1 Ensure that activities performed are authorized by the OM responsible for the applicable building, system, and area.
- 4.8.1.2 Acknowledge ownership of systems and equipment in assigned area and conduct activities with a safety first approach in accordance with the Conduct of Operations Manual.

- 4.8.1.3 Ensure the safety and general welfare of RFP employees, the general public, and the surrounding environment are of primary concern during the daily conduct of shift operations, activities, and functions.
- 4.8.1.4 Conduct operations safely, professionally, and in accordance with applicable procedures, OSRs, and sound operating practices.
- 4.8.1.5 Remain cognizant of job training and qualification requirements and the importance of maintaining current qualifications for assigned duties.
- 4.8.1.6 Ensure work is accomplished safely, efficiently, reliably, and in accordance with applicable schedules and specifications.
- 4.8.1.7 Take whatever immediate action is necessary during an emergency to place the facility and its equipment in a safe condition and protect equipment, personnel, and public safety.
- 4.8.1.8 Read applicable requirements, orders, procedures, and practices before use and notify supervision of any lack of understanding or observed deficiency.
- 4.8.1.9 Act as swiftly as possible to:
 - (1) Make appropriate immediate response to problems arising from any source in assigned facilities.
 - (2) Inform supervision of abnormal conditions.
- 4.8.1.10 Maintain clear lines of communication with supervision.

- 4.8.1.11 Repeat instructions for operation of equipment as necessary for supervision to ensure correct understanding.
- 4.8.1.12 Be aware of personal radiation exposure levels and take appropriate action to minimize exposures.
- 4.8.1.13 Maintain good housekeeping in assigned areas.
- 4.8.2 **Responsibilities Related to Physical, Administrative, or Procedural Deficiencies**
 - 4.8.2.1 Suspend operations, if appropriate, and notify supervision if deficiencies in procedures, orders, and practices are encountered.
 - 4.8.2.2 Take measures to initiate correction of the deficiency in accordance with the IWCP.
- 4.8.3 **Facility Status and Shift Responsibilities**
 - 4.8.3.1 Maintain awareness and keep supervision informed of equipment status and conditions.
 - 4.8.3.2 Thoroughly tour all assigned areas.
 - 4.8.3.3 Maintain shift round inspection sheets and equipment and area logs.
 - 4.8.3.4 Ensure duties are transferred only through formal turnover to a qualified relief.

5. INSTRUCTIONS

5.1 Conduct of Operations

5.1.1 Management Expectations and Involvement

- 5.1.1.1 The fundamental objective at RFP is to conduct operations in a safe and professional manner that complies with applicable laws, orders, and regulations. The safety and general welfare of RFP employees, the general public, and the surrounding environment is the primary concern during daily conduct of operations activities. Consistent with this objective, RFP goals are to deliver products of the highest quality, within cost and schedule constraints, supported by an environment of formality, professionalism, and teamwork that stimulates and challenges all employees.
- 5.1.1.2 Management expectations for professionalism and standards for performance are defined by this document, referenced operations, and RFP-wide procedures.
- 5.1.1.3 Clearly communicates these expectations and standards by training and reinforcement by attention and involvement in the daily conduct of shift operations activities, including support provided by nonoperations program areas.
- 5.1.1.4 Conveys an attitude of trust and an approach that promotes teamwork at all levels.
- 5.1.1.5 Recognizes and expects professionalism from all personnel.

- 5.1.1.6 Promotes open communications so personnel at all levels are encouraged to provide complete input and feedback, including the identification of noncompliances and other problems.
- 5.1.1.7 Encourages personnel to recognize shortcomings, address mistakes, and seek assistance.
- 5.1.1.8 Holds personnel accountable for operating performance.
- 5.1.1.9 Counsels, retrain, and disciplines personnel involved in significant or frequent violations of operating practices in accordance with site policies.

5.1.2 Commitment to Excellence

- 5.1.2.1 Safe operation requires a personal commitment to maintain the highest standards and principles of excellence in the performance of shift activities and functions.
- 5.1.2.2 These standards and principles reflect a safety-first approach to operations activities and the conservative and formal decision-making processes that are required.
- 5.1.2.3 These standards and principles are embodied in the following statements of commitment, which are intended to promote the achievement of excellence. Management, operations, and support personnel adhere to these commitments and encourage acceptance and day-to-day use by all personnel at RFP.
 - 5.1.2.3.1 Never relinquish shift responsibilities unless properly relieved, including a thorough turnover briefing to relief personnel.

- 5.1.2.3.2 Remain constantly alert and maintain awareness of facility, system, or component status and anticipate conditions that could adversely affect safety or reliability of the facility.
- 5.1.2.3.3 Remain diligent in maintaining plant and personnel safety by identifying and actively pursuing the resolution of safety concerns.
- 5.1.2.3.4 Demonstrate an attitude of professionalism through demeanor, personal appearance, and attention to detail.
- 5.1.2.3.5 Display a sense of pride in the conduct of assigned responsibilities.
- 5.1.2.3.6 Understand the necessity of effective communications.
- 5.1.2.3.7 Ensure all communications, including logs and records, are timely, accurate, and concise.
- 5.1.2.3.8 Accept the responsibility for planning, performance, and assessment of all work activities and functions.
- 5.1.2.3.9 Cooperate with independent organizations, recognizing the need for monitoring and review of operations activities, including access to conduct audits, surveillances, and inspections.
- 5.1.2.3.10 Foster the concept of teamwork among and between all groups. Mutual support, courtesy, and flexibility are essential to achieve cooperation and unity.

5.1.2.3.11 Recognize the importance of maintaining and expanding professional qualifications and enhancing employee's facility knowledge by active participation in all aspects of training.

5.1.2.3.12 Be governed by, and adhere to, applicable federal laws by complying with RFP procedures, policies and OSRs.

5.1.3 Professionalism

5.1.3.1 Operations and support personnel demonstrate their commitment to excellence by professional behavior.

5.1.3.2 Display professional behavior at all times and reflect recognition of responsibilities and a safety-minded approach to the conduct of shift operations.

5.1.3.3 Perform activities with a level of formality and deliberation commensurate with the potential for safety, health, and environmental impact.

5.1.3.4 Operations management ensures a business-like and professional atmosphere conducive to safe and efficient operations exists at all times because of the critical nature of control areas or rooms, and production areas.

5.1.3.5 Operations personnel observe the rules of common courtesy at all times.

5.1.3.6 Extend courtesy to management and supervisors, fellow workers, and personnel from other groups.

- 5.1.3.7 When difficulties are encountered in interfacing with others, attempt resolution in a courteous and professional manner.
- 5.1.3.8 If difficulty persists, request management assistance.
- 5.1.4 **Fitness for Duty**
 - 5.1.4.1 Operations and support personnel present and maintain themselves in a condition fit for duty.
 - 5.1.4.2 Offgoing shift personnel are not to turn over their duties and responsibilities to oncoming personnel if it is obvious that the individual is not capable of performing requirements of the shift.
 - 5.1.4.3 Confidentially advise SM, Shift Supervisor, or Senior Line Management if behavior is observed that indicates an individual is unfit for duty.
 - 5.1.4.4 The SM, Shift Supervisor, or Senior Line Management takes the actions necessary, including referral to Occupational Health, to evaluate and determine the fitness of personnel to assume responsibilities. The SM's judgment in this regard is final.
 - 5.1.4.5 Management continuously evaluates the fitness for duty of personnel.
 - 5.1.4.6 The SM, as quickly as safe operation permits, documents the circumstances leading to removal of an employee from duties and notifies appropriate RFP management.

5.1.5 Operations Teamwork

- 5.1.5.1 Operations management encourages communications and requires teamwork among and between groups that operate, maintain, and support facility systems and equipment.
- 5.1.5.2 Encourages personnel to view themselves as part of the RFP team with a common goal of successful operation of the facility.
- 5.1.5.3 Resolves conflicts between workers, management, or groups in a timely and professional manner.
- 5.1.5.4 Emphasizes the importance of shift teamwork in classroom training, shift training, and on-duty conduct.
- 5.1.5.5 Uses teams whenever feasible to identify and implement process and facility improvements, to identify and correct the root cause of problems, and to correct facility problems or to perform investigations or assessments.

5.1.6 Self Evaluation

- 5.1.6.1 Management emphasizes identification of weaknesses and correction through self evaluation as part of the daily work routine and involves all levels of management and personnel.
- 5.1.6.2 Operations and support personnel use and promote continual self evaluation, performance improvement, and quality improvement as a part of daily routine.
- 5.1.6.3 Self evaluation is based on performance and the results achieved, rather than solely on compliance with requirements.

- 5.1.6.4** The self evaluation process is used to:
- (1) Critically examine performance.
 - (2) Seek participation of others as a means to improve performance.
 - (3) Be inquisitive about the principles underlying operations and procedures.
 - (4) Develop a questioning attitude that ensures concerns are discussed and resolved as they arise.
 - (5) Exhibit honesty and openness to encourage subordinates and peers to communicate their concerns and welcome constructive criticism.
 - (6) Strive for continued improvement in assigned programs.
 - (7) Commit to key management principles, effective planning, appropriate documentation, and rigorous adherence to operating procedures.
- 5.1.6.5** Use appraisals, performance assessments, surveillances, inspections, Statistical Process Control charts, deficiency trends, and evaluations of operating experience as a basis for determining needed improvements.
- 5.1.6.6** Use Root Cause Analysis to identify corrective actions which will, when implemented, prevent recurrence of identified problems.
- 5.1.6.7** Use a Lessons Learned Process to learn from mistakes and share lessons learned with other organizations.

93-DMR-000355

5.1.6.8 Use the following procedures for standardized critical self evaluation methods:

- (1) RFP Policy 7-23, Self Assessment
- (2) 1-10000-ADM-16.05, Lessons Learned
- (3) 1-11000-ADM-16.03, Cause Analysis
- (4) 1-11000-ADM-16.06, Conduct of Critiques
- (5) 1-11000-ADM-16.10, Self Evaluation

5.1.7 Planning for Safety

5.1.7.1 Management, operations, and support personnel assume direct responsibility for conduct of activities and functions in a manner that emphasizes safety and minimizes the potential for challenges to safety limits, exposures, or contaminations.

5.1.7.2 When conditions arise that are unexpected or are outside the scope of normal conditions, personnel exercise conservative judgment and obtain management guidance as appropriate, prior to proceeding.

5.1.7.3 Perform time-critical conditions requiring immediate operator response in accordance with Steps 5.3.2.5 through 5.3.2.5.16 of this procedure.

5.1.7.4 Be proactive and responsive to identified problems with the objective of correcting root causes and improving performance.

- 5.1.7.5 Observe DOE-prescribed Occupational Safety and Health Administration (OSHA) standards applicable to the work in progress and report to the SM any condition which might lead to a violation of these standards.

5.1.8 Defense in Depth Philosophy

- 5.1.8.1 Safe and effective operation is based on inter-related criteria that form the bases of the defense in depth approach. These criteria include but are not limited to:

- (1) Safe design of equipment and processes.
- (2) Detailed and technically accurate procedures that are clear and usable.
- (3) Trained and qualified operators.
- (4) Personnel doing their jobs correctly.
- (5) Managers checking to ensure personnel do their jobs correctly.
- (6) Quality control inspections as appropriate.
- (7) Operations self assessment.
- (8) Independent safety reviews.
- (9) Quality Assurance audits.
- (10) Performance Assurance assessments.
- (11) DOE oversight.

- 5.1.8.2 Operations and support personnel recognize and promote this defense in depth approach to facility safety during the daily conduct of operations.

5.1.9 Criticality and Operational Safety Limits

- 5.1.9.1 Basic operator knowledge and understanding of building safety parameters is essential to preclude a hazard from developing into an event that has unacceptable radiological consequences to the public and plant personnel.
- 5.1.9.2 DOE authorization for operation of RFP is based on the Final Safety Analysis Report (FSAR) conclusion that operations can be conducted in a manner that limits health and safety risks of the public and employees to an acceptable level and adequately protects the environment.
- 5.1.9.3 As a part of the facility FSAR, the OSRs are facility specific requirements that define the conditions, safe operating limits, and the basis thereof.
 - 5.1.9.3.1 The OSRs define management or administrative controls required to ensure the safe operation of RFP.
 - 5.1.9.3.2 The OSRs include SLs, LCOs, SRs, design features, and administrative controls.
 - 5.1.9.3.3 These limits and controls have been incorporated into operating, surveillance, alarm response, technical and administrative procedures, and operator aids used in normal and off normal operations activities.
- .1 Operations are deemed to be within the OSRs when SLs, LCOs, SRs, design features, and administrative controls are met or the defined remedial action has been performed.

5.1.9.3.3.2 Use of the proper procedure and compliance with that procedure is as a primary method for determining OSR compliance.

5.1.9.3.4 Safety parameters are defined by the OSR, on a building specific basis and therefore only apply to facilities with issued OSRs.

5.1.10 Safety, Environment, and Operating Goals

5.1.10.1 Management establishes performance goals and objectives that encourage continual improvement in performance and avoids a sense of self-satisfaction or complacency.

5.1.10.2 Develops operations goals and monitoring progress.

5.1.10.3 Establishes building specific goals prior to the start of each fiscal year that include areas such as:

- (1) Minimizing the unavailability of safety systems.
- (2) Minimizing personnel errors.
- (3) Promoting practices designed to reduce all exposures ALARA.
- (4) Minimizing lost facility capability.
- (5) Minimizing the number of unscheduled facility shutdowns.
- (6) Timely completion of scheduled surveillances.
- (7) Minimizing overtime.
- (8) Achieving and maintaining complete staffing, training, and qualification of shift positions.
- (9) Minimizing waste.

5.1.10.3 (continued)

- (10) Minimizing conditions that result in alarms.
- (11) Minimizing the average age of Nonconformance Reports (NCRs), deficiencies, and corrective action plans.
- (12) Minimizing the number of temporary modifications.
- (13) Limiting the number of open modification packages.
- (14) Minimizing the number of lost time accidents.

5.1.10.4 Ensures developed goals are auditable, measurable, realistic, and challenging.

5.1.10.5 Develops action plans for achieving goals each year using input from operations supervisors and personnel.

5.1.10.6 Develops performance indicators, both quantitative and qualitative, for trending performance and ensuring goals are met.

5.1.11 Control of Systems and Activities

5.1.11.1 Professional conduct and good shift operating practices result in appropriate attention to facility status.

5.1.11.2 Operations and support personnel monitor facility systems and equipment, including supporting activities, to prevent abnormal conditions and to detect adverse trends so that appropriate actions can be taken.

5.1.11.3 Establish an ownership concept for facility, equipment, and activities in assigned areas as a prerequisite to achieving excellence in performance.

5.1.11.4 The on-shift operations team safely operates RFP facilities by adhering to appropriate procedures, OSRs, and sound operating practices.

5.1.11.5 The on-duty SM is vested with authority for RFP operations:

5.1.11.5.1 Transfers authority only by formal turnover to a qualified relief.

5.1.11.5.2 Maintains authority over, and responsibility for, all facility operations and associated support activities.

5.1.11.5.3 Notifies senior management if any individual bypasses or overrules his operational judgement.

5.1.12 Delegation of Authority

5.1.12.1 Managers described in the responsibilities section of RFP procedures may delegate their authorities to personnel within their organizations, however the managers retain overall responsibility.

5.1.12.2 Delegate authority to specific individual(s) for specific effective dates using formal written notification.

5.1.12.3 Issue memorandum for temporary delegations of authority.

5.1.12.4 The GM may issue a standing order to delegate authority for lengthy time periods.

5.1.12.5 The OM may issue a long term shift order or operations order to delegate authority for lengthy time periods.

- 5.1.12.6 The OM, by nature of this position and the responsibilities, may delegate any of the responsibilities assigned in the Conduct of Operations Manual to personnel to maintain safe and efficient operation of the facility.

5.1.13 **Conduct of Operations Implementation Plan**

- 5.1.13.1 Each Operations Manager submits a Conduct of Operations Implementation Plan or implementing procedure, in accordance with 1-A01-PPG-001, Procedure Process, to the responsible AGM and DOE for approval. The implementation plan includes:

- (1) Consideration of available resources and budgets.
- (2) Sections in the Conduct of Operations Manual which are to be adhered to and sections that do not apply, with supporting criteria and justification used for the determination.
- (3) A schedule for when each Operations Manager will be in full compliance with the implementation plan or implementing procedure.

5.2 **Staffing and Training**

5.2.1 **Building and Shift Complement**

- 5.2.1.1 To ensure that operations are conducted within the safety envelope, minimum staffing requirements comply with the building specific OSRs.
- 5.2.1.2 OMs evaluate and provide minimum staffing requirements for buildings without OSRs.

93-DNR-000355

5.2.1.3

At least one of the following personnel is present on the site at all times to control emergency work:

- (1) OM
- (2) SM
- (3) Shift Technical Manager/STA
- (4) Designee appointed in writing by the OM

5.2.1.4

Where specifically assigned, at least one STA is available 24 hours per day.

5.2.1.5

Maintain a list of selected facility personnel by name, title, and work and home telephone numbers. Make this list readily available at the SM's work station. Ensure the list includes, as appropriate, the following personnel:

- (1) GM
- (2) Responsible AGM
- (3) OM
- (4) RFP Shift Superintendent
- (5) Assistant Operations Manager
- (6) Radiation Protection Technologists (RPTs)
- (7) Fire Department Staff
- (8) Maintenance Manager or designated on-call personnel
- (9) Technical Support Manager or designated on-call personnel
- (10) SMs
- (11) STAs
- (12) Emergency Operations Coordinator
- (13) Key support personnel designated by the OM
- (14) DOE representatives

5.2.2 Overtime Requirements and Restrictions

5.2.2.1 Working hours of operations and support personnel performing safety-related functions are limited according to DOE policy and RFP Health and Safety requirements.

5.2.2.2 Adequate shift coverage is maintained without heavy use of overtime.

5.2.2.3 The objective of the RFP overtime policy is to work a nominal 40-hour work week during normal operations.

5.2.2.4 In the event of unforeseen problems that require extensive effort, the following overtime limitations are used on a temporary basis.

5.2.2.4.1 An individual is not permitted to work more than any of the following time intervals, excluding shift turnover time:

- (1) 16 consecutive hours
- (2) 16 hours in any 24-hour period
- (3) 24 hours in any 48-hour period
- (4) 72 hours in any seven-day period
- (5) 14 consecutive days without at least two consecutive days off

5.2.2.4.2 A break of at least eight hours is required between work periods, including shift turnover time.

5.2.2.4.3 Except during extended shutdown and maintenance periods, the use of overtime is considered on an individual basis, and not for the entire staff on a shift.

5.2.2.5 To ensure excessive overtime (in excess of the limits specified in Step 5.2.2.4) is not assigned to operations and support personnel performing safety related functions, the following provisions apply:

5.2.2.5.1 OM or the equivalent line management approves individual overtime.

5.2.2.5.2 When excessive overtime approval is obtained verbally, documents the approval using internal correspondence within 24 hours or the next normal working day.

5.2.2.5.3 Retains documentation of overtime in accordance with RFP Records Management Manual requirements.

5.2.2.6 GM designee authorizes any deviation from overtime limitations.

5.2.3 Staff Training and Shift Training Requirements

5.2.3.1 This subsection provides training and qualification requirements that support the RFP Conduct of Operations program.

5.2.3.2 The RFP process leading to personnel qualification includes training and other elements such as education, experience, and special requirements for performance of assigned responsibilities.

5.2.3.3 Training program development and approval includes:

- 5.2.3.3.1 Performance-based training programs, including initial and continuing components, are established to develop, enhance, and verify the knowledge and skills of individuals who operate, maintain, provide support, supervise, or manage building activities.
- 5.2.3.3.2 Training and qualification programs consist of a combination of classroom and on-the-job training.
- 5.2.3.3.3 Training and qualification programs include safety aspects of the following items for each job and are specific to the assigned building:
 - (1) Procedures and their changes
 - (2) OSRs
 - (3) Configuration Control procedures
 - (4) Facility modifications
 - (5) Quality Assurance requirements
 - (6) Industry operating experience
 - (7) Radiation protection
 - (8) Nuclear criticality
 - (9) Abnormal and emergency conditions
 - (10) Emergency planning
 - (11) Respiratory protection
 - (12) Glovebox operations
 - (13) Industrial safety

5.2.3.3.3 (continued)

- (14) Lockout and tagout program
- (15) Radioactive materials
- (16) Location and function of safety equipment
- (17) IWCP
- (18) Occurrence notification process
- (19) Fire protection
- (20) Radioactive and hazardous waste

5.2.3.3.4 Training and qualification programs include initial and periodic (at least annual) instruction regarding DOE prescribed OSHA standards.

- .1 All operations personnel are instructed regarding requirements outlined in the current DOE safety and health poster.
- .2 All operations personnel are fully informed of their rights, protections, and obligations which include the following items regarding DOE prescribed occupational safety and health protection:
 - (1) Nondiscrimination
 - (2) The filing of complaints
 - (3) Availability of the DOE-prescribed OSHA standards and complaint forms
 - (4) Accompanying the DOE inspector during the conduct of compliance inspections or during the conduct of inspections based on the filing of complaints.

5.2.3.3.5 For job classifications designated in 1-10000-TUM, Training User's Manual (TUM), formal qualification is required.

5.2.3.3.6 Qualification standards are developed in coordination with Performance-Based Training and approved by each responsible organization. (See the TUM.)

5.2.3.4 Continuing training for operations personnel includes:

5.2.3.4.1 Operation of equipment and handling of fissile material and hazardous or mixed wastes.

5.2.3.4.2 Annual abnormal procedure and emergency training for operations personnel and supervision.

5.2.3.4.3 Continuing training programs are:

- (1) Established as a portion of training and qualification programs.
- (2) Administered to maintain and enhance the proficiency of operations and technical support personnel who perform or supervise functions associated with building mission goals and VSS.
- (3) Administered on a two year cycle or more frequently if determined by the OM or if dictated by other requirements.
- (4) Structured based on specific position needs.
- (5) Administered and documented throughout the cycle.
- (6) Reviewed periodically for essential training subjects and emergent training requirements.

5.2.3.5 On-shift training for operations personnel:

- (1) Is implemented to support qualification requirements.
- (2) Enhances the ability of operations and support personnel to perform assigned tasks by developing, enhancing, and verifying their knowledge and skills.
- (3) Is conducted so that personnel receive training within the job environment and with as much equipment operating experience as possible.
- (4) Is conducted in accordance with established programs that identify the activities, functions, and related knowledge requirements for the trainee.

5.2.3.6 Requirements for developing, enhancing, and verifying the skills and knowledge of shift operations and support personnel are addressed in 1-31000-COOP-003, Control of On-Shift Training.

5.2.3.7 Required reading program includes:

5.2.3.7.1 A required reading file and file index are established and maintained to ensure that individuals are made aware of information that is important to the safe and efficient operations at their assigned work station.

5.2.3.7.2 The required reading file contains:

- (1) Procedure changes.
- (2) Equipment design changes.
- (3) Industry and in-house occurrences.
- (4) Other information necessary to keep operations personnel aware of current facility activities.

5.2.3.7.3 The required reading file is made readily available.

5.2.3.7.4

Measures are established to assign required reading for each position or group of positions, including:

- (1) Required dates for completion of reading based on the nature of the material.
- (2) An immediate reading designation for documents to be read before assuming responsibility for a shift position.

5.2.3.7.5

Documentation of required reading includes:

- (1) Initialing and dating by the assigned reader.
- (2) Retaining documentation of required reading for one year.
- (3) Additional requirements in accordance with the TUM.

5.2.3.7.6

A required reading file periodic review is performed to:

- (1) Verify assigned reading is completed by the required dates.
- (2) Remove material that has been read by all designated personnel from the required reading file. Such material may be placed in a reference file.

5.3 Shift Routines and Operating Practices

5.3.1 General

5.3.1.1

Shift routines and operating practices are controlled to satisfy management expectations of operating excellence and meet specific regulatory requirements.

5.3.1.2

Formality is applied to achieve the control and order required to ensure safe and consistent operation within facility design limits.

5.3.1.3 Formality is achieved through the development of shift routines and operating practices that are deliberate, uniform, and proceduralized.

5.3.2 Use of Instructions, Procedures, and Drawings

5.3.2.1 The latest revision of approved instructions, procedures, and drawings are used to provide the level of formal direction necessary to ensure the facility is operating safely and reliably.

5.3.2.2 Normal operation is conducted in accordance with RFP instructions, procedures, and drawings.

5.3.2.3 The supervisor directing the work or evolution ensures these procedures, instructions, and drawings are followed by individual performing the work or evolution.

5.3.2.4 The following criteria govern the use of plant instructions, procedures, and drawings at all times:

5.3.2.4.1 When an activity is being performed in accordance with a Use Category 1 procedure, a working or controlled copy is in the possession of the user, or a designated procedure reader, and the Instructions Section is followed step by step. When stand-alone instructions sections are used within the Instructions Section of a procedure, they are not independent of the other major sections of the procedure.

93-DNR-000355
93-PCN-000270

93-DMR-000355

5.3.2.4.2

When an activity is being performed in accordance with a Use Category 2 procedure, a working or controlled copy is available at the work location for timely use. These procedures should be referred to as soon as possible; they should be in hand when time allows to ensure that all actions have been performed correctly and to verify any required follow-up action. Committing the initial steps to memory is required.

93-DMR-000355

5.3.2.4.3

When an activity is being performed in accordance with a Use Category 3 procedure, a working or controlled copy is available for reference at the work station. The tasks covered by this category are performed frequently and are not complex. Individual sections can normally be accomplished from memory and are within the training level and knowledge of the performer. When performing routine, frequent, daily, or shift rounds for data taking and other routine activities performed at the same frequency, only the appendices, data, or log sheets need to be with the person performing the rounds, even if those appendices or sheets are cross-referenced to specific steps in the procedure.

93-DMR-000355

5.3.2.4.4

When an activity is being performed in accordance with a Use Category 4 procedure, a working or controlled copy is available for reference at a known location in the general area.

5.3.2.4.5

If a plant instruction, procedure, or drawing has no use categorization and the activities or functions controlled by the document are extensive or complex, a working or controlled copy is present and followed step by step.

93-DMR-000355

5.3.2.4.6 If a plant instruction, procedure, or drawing has no use categorization and the activities or functions controlled by the document are not extensive or complex, a working or controlled copy is available for reference at a known location in the general area.

5.3.2.4.7 When instructions or procedures contain sign-offs for various activities, the sign-offs are completed in a step-by-step manner consistent with completion of the activity.

5.3.2.5 The following criteria govern the use of plant instructions, procedures, and drawings during normal conditions:

5.3.2.5.1 A controlled copy of applicable instructions, procedures, and drawings, including Health and Safety Practices Manual, RFP Policy Manual, RFP Quality Assurance Manual, and RFP Emergency Plans, is maintained near the SM's work station.

5.3.2.5.2 Additional selected controlled copies of applicable instructions, procedures, and drawings may be maintained at other appropriate locations.

5.3.2.5.3 Working copies of instructions and procedures are issued and controlled in accordance with 1-48000-DM-001, Document Control Program.

- 5.3.2.5.4 Working copies of drawings are issued and controlled in accordance with the IWCP Manual; DES-6, Control of Engineering Drawings; and DES-41, Engineering Document Distribution Chart.
- 5.3.2.5.5 When performing work, operations personnel use working or controlled copies of controlled instructions, procedures, and drawings.
- 5.3.2.5.6 When working in conditions that may distort or contaminate a controlled copy, use working copies of controlled instructions, procedures, and drawings.
- 5.3.2.5.7 When a working copy is used, the user ensures the document has been verified and the expiration date has not been exceeded.
- 5.3.2.5.8 When a working copy is no longer needed, data sheets and appropriate signed off portions of the procedure are retained in accordance with RFP Records Management Manual requirements, and the remainder of the document is returned to the appropriate Document Control Center or Procedure Coordinator for reissue or proper disposition.
- 5.3.2.5.9 If equipment status or other information necessary to complete a step is obtained by a method other than direct observation by the performer of the step, such as by telephone, the information is be obtained from either:
- (1) A qualified individual who acquired the information by direct observation.
 - (2) An individual to whom, due to job function, the information was reported.

- 5.3.2.5.10 The instructions of procedures are followed step-by-step except in cases where either:
- (1) The procedure specifically allows deviation from the as written step by step sequence.
 - (2) The procedure has distinct stand-alone subsections.
- 5.3.2.5.11 If a procedural step requires a verification be made, and the stated condition is not met, (unless specifically allowed within the procedure) performance of the procedure is stopped until a resolution is obtained that meets the requirement of the procedure.
- 5.3.2.5.12 If a procedure prerequisite cannot be met because of operating conditions or maintenance activities, the performing individual notifies the SM and does not perform the procedure.
- 5.3.2.5.13 If the expected response to a procedure is not obtained, places the system in a stable and safe condition, the performing individual notifies the SM and obtains further direction.
- 5.3.2.5.14 If an activity cannot or should not be performed according to a procedure as written, the performing individual places the system or component into a stable and safe condition and informs the SM.
- 5.3.2.5.15 The SM resolves procedure conflicts or obtains resolution from higher level management.

5.3.2.5.16 If an activity is not required to be controlled by an approved procedure or approved IWCP work package (for example housekeeping activities), operations personnel evaluate the activity and obtain approval from the OM prior to performing the activity.

5.3.2.6 The following criteria govern the use of OSRs, plant instructions, and procedures during emergency conditions:

5.3.2.6.1 Emergency conditions include response to warning signals that might be activated in the event of fire, radiation, or other possible emergency.

5.3.2.6.2 Conduct normal facility operation and emergency response in accordance with approved procedures that reflect design safety limits.

5.3.2.6.3 During emergency conditions where procedures do not exist, operators may take immediate action without obtaining prior approval as necessary to place the facility in a safe condition and protect personnel, plant, and the environment.

5.3.2.6.4 If time permits, operators obtain approval from the SM for response to emergency situations.

5.3.2.6.5 Upon occurrence of time-critical emergency conditions, operators take immediate actions based on training and knowledge. These actions include:

- (1) Considering plant safety over facility production.

5.3.2.6.5 (continued)

- (2) Responding to emergency situations that require immediate action (for example, preventing further changes in the configuration of fissile material in the event a Criticality Safety Operating Limit (CSOL) is exceeded).
- (3) Notifying the SM as soon as possible.
- (4) Using normal operating instructions after the facility is in a stable condition to ensure proper equipment operation.
- (5) Documenting actions taken in appropriate logs.

5.3.3 Formality of Shift Operations

- 5.3.3.1 Operations and support personnel are the owners of the physical plant, and each operator is the owner of equipment and activities in their assigned area. With this ownership comes the responsibility for control of, direction of, and restraint on all activities affecting the plant.
- 5.3.3.2 To ensure operations activities are effectively controlled, order and formality are applied to shift operations.
- 5.3.3.3 The SM has authority over and responsibility for, the facility, systems, activities and operations on each shift.
- 5.3.3.4 Authority to operate equipment and systems is governed by the following criteria:
 - 5.3.3.4.1 Operations and support personnel follow approved procedures and instructions during normal operations.

- 5.3.3.4.2 Only trained and qualified operations personnel operate facility equipment or systems, except in situations where trainees operate equipment as part of on-shift training.
- 5.3.3.4.3 Trainees are supervised and controlled by a qualified operator who normally would perform the operations or by training department personnel with operator qualifications.
- 5.3.3.4.4 Trainee operation of equipment is immediately stopped during unanticipated situations, abnormal events, accident conditions, or whenever qualified operations personnel believe suspension is necessary to ensure safe and reliable facility operation.
- 5.3.3.4.5 Operating procedures include a personnel staffing statement to identify the number and positions of individual(s) required to perform or support performance of the procedure.
- 5.3.3.4.6 The OM specifies in writing those general activities that may normally be performed without informing the SM and amplifies these specifications as appropriate.
- 5.3.3.4.7 The SM approves nonroutine operation of controls outside the guidance of approved instructions and procedures during normal situations.
- 5.3.3.5 The following criteria apply to status practices:
 - 5.3.3.5.1 The SM maintains operational awareness and control of building activities at all times.

- 5.3.3.5.2 All on-shift operations personnel understand equipment status and the authority to operate equipment so activities are controlled and coordinated.
- 5.3.3.5.3 The SM provides operational and status information to the OM as appropriate and to operations personnel as it relates to their area of responsibility.
- 5.3.3.5.4 The SM may delegate authorization for status changes to equipment and systems of lesser importance to other cognizant shift positions.
- 5.3.3.5.5 Operations and support personnel periodically advise the SM of changes in status of assigned equipment and systems.
- 5.3.3.5.6 Report emergencies to the SM.
- 5.3.3.5.7 The SM maintains awareness and control by:
- (1) Serving as the control point for authorizing and controlling facility activities performed by operations personnel and support organizations.
 - (2) Maintaining proper configuration and authorizing status changes to facility systems and components.
 - (3) Routinely reviewing the status of work activities in progress.
 - (4) Receiving information from the OM or operations and support personnel on equipment and system status changes, abnormalities, and difficulties in performing assigned tasks as they occur.
 - (5) Directing operations personnel activities.
 - (6) Using the system status board.

5.3.3.5.7 (continued)

- (7) Participating in the shift relief and turnover program.
- (8) Reviewing operator log entries and round sheets.
- (9) Maintaining system and equipment alignment records for reference by the operations shift.

5.3.3.6 The following criteria apply to process changes:

5.3.3.6.1 Under normal operating conditions, the SM approves all process and process rate changes occurring on shift and approves utility changes.

5.3.3.6.2 The SM informs affected operations, process, and support personnel before commencing process changes, allowing enough lead time for appropriate personnel actions.

5.3.3.7 The following criteria apply to pre-evolution briefings:

5.3.3.7.1 The purpose of pre-evolution briefings is to ensure that appropriate operations and support personnel clearly understand the work to be performed, have an opportunity to ask questions or raise concerns, and have the information required to prevent personnel error because of misunderstandings or inadequate communications.

5.3.3.7.2 When nonroutine procedures or complex or critical evolutions are planned, conduct pre-evolution briefings.

5.3.3.7.3 Include a discussion of the potential impact the evolution might have on SLs, LCOs, and remedial actions to mitigate any potential impact.

5.3.3.7.4 The requirements controlling pre-evolution briefings are contained in 1-31000-COOP-011, Pre-Evolution Briefings.

5.3.3.8 The following criteria apply to work stations:

5.3.3.8.1 Work stations are established for each shift position and are equipped with, or have access to, necessary reference material including instructions, procedures, drawings, and communication equipment.

5.3.3.8.2 All personnel display professional behavior at all times and conduct only work related activities at work stations.

5.3.3.8.3 Physical characteristics, environmental conditions, and maintenance of work stations support safe and reliable operations.

5.3.3.8.4 The following criteria apply to work station access:

- .1 Access to work stations is limited to persons with a need to be in the area.
- .2 Access to control room or work station is limited to those persons on official business only.
- .3 At-the-controls area of the control room is clearly identified, and its boundary is understood by all persons who are granted access to the control room.

5.3.3.8.4.4 Access to the control room and at-the-controls area is controlled by control room operators and their supervisors.

5.3.3.8.5 The following criteria apply to temporary work stations:

- .1 The OM determines when a temporary work station is required.
- .2 Establishes temporary work stations when conditions arise that require increased control or surveillance over systems or equipment and no other work station exists that can perform the needed function.
- .3 Establishes the activities to be performed at the temporary work station in a shift order or operations order.

5.3.3.9 The following criteria apply to work distractions:

5.3.3.9.1 On-duty operations personnel are attentive and responsive to operating parameters and are not distracted from their assigned duties.

5.3.3.9.2 Control work distractions to maintain a professional work environment, to promote good ALARA practices, and to limit the generation of additional waste from radiation controlled areas.

5.3.3.9.3 Minimize the administrative workload of operators and limit duties to activities that support safe and reliable operations.

- 5.3.3.9.4 Evaluate any assignment of additional duties to ensure that safety is not compromised.
- 5.3.3.9.5 Training materials, technical manuals, procedures, operator aids, or other written, audible, or visual materials that relate to operator duties may be used at work stations, as long as the operator's primary duties are not compromised.
- 5.3.3.9.6 Activities such as radios, games, and hobbies not related to the job or facility operation are prohibited.
- 5.3.3.9.7 Magazines, newspapers and other literature not related to the job or facility operation are prohibited.
- 5.3.3.9.8 The SM provides additional guidance to the shift crews as required for the use of potentially distractive materials and devices.
- 5.3.3.9.9 The SM takes action, such as providing temporary relief personnel, to minimize activities that have the potential of interfering with the duties of operations personnel. Such activities include:
- (1) Discussions with other plant personnel on subjects not related to job functions or facility support.
 - (2) Unnecessary congregation of personnel.
 - (3) Investigations of incidents that require interviews of shift personnel to gather pertinent information on an event or the actions of an operator.
 - (4) Multiple evolutions occurring such that the operator's ability to detect and respond to abnormal conditions is compromised.

5.3.3.9.9 (continued)

- (5) Interviews or discussions with plant or nonplant personnel that are extended and require active participation by shift personnel.

5.3.3.10 The following criteria apply to housekeeping:

- 5.3.3.10.1 Housekeeping is an integral part of routine shift practices.**
- 5.3.3.10.2 Operations and support personnel ensure that foreign material and objects not necessary for building operations, ongoing maintenance, or testing is restricted from areas near control panels to preclude inadvertent actuation of controls resulting in unplanned events or safety issues.**
- 5.3.3.10.3 Maintain facilities in a clean and orderly condition at all times.**
- 5.3.3.10.4 Because of their critical nature, maintain control areas, rooms, and work stations in an organized condition that promotes safe and efficient operations.**
- 5.3.3.10.5 Maintain work areas, table and desk tops, miscellaneous books, and papers in an organized and professional manner.**

5.3.4 Shift Relief and Turnover

- 5.3.4.1 For continuous operating facilities, shift operations personnel, when on duty, remain on duty with full responsibilities of their position until properly relieved.**

- 5.3.4.2 If no relief will be provided, such as for a weekend shutdown, refer to 1-31000-COOP-007, Shift Relief and Turnover.
- 5.3.4.3 Perform shift relief using formally defined methods that ensure a turnover of essential information to operations and support personnel.
- 5.3.4.4 Oncoming shift operations personnel review documents as necessary to become familiar with current shift activities and operating status before assuming responsibility for their shift position.
- 5.3.4.5 Inform oncoming shift operations personnel of conditions within their respective operating or support areas to enable proper accomplishment of their duties.
- 5.3.4.6 Specific requirements controlling this activity are contained in 1-31000-COOP-007, Shift Relief and Turnover.
- 5.3.5 **Shift, Standing, and Operations Orders**
 - 5.3.5.1 Shift, standing, and operations orders are used to provide timely administrative guidance and short term information to ensure all operations groups are informed of current situations, special requirements, and upcoming events or evolutions as specified by operations management.
 - 5.3.5.2 Operations and support personnel do not issue or use shift, standing, and operations orders as a substitute for a properly approved procedure revision or change.

5.3.5.3 Promptly incorporate into appropriate procedures information and policies intended to be permanent.

5.3.5.4 Requirements controlling preparation and use of these orders are contained in 1-31000-COOP-013, Shift, Standing, and Operations Orders.

5.3.6 Communications Criteria

5.3.6.1 Operations and support personnel use formality in communications to achieve complete and consistent exchange of information or direction.

5.3.6.2 Formality is especially important when nuclear and personnel safety is involved or complex evolutions are performed.

5.3.6.3 With the nature of shift operations, including the complexity of operating evolutions and the need for procedural compliance, effective and timely communications among operations and support personnel is required.

5.3.6.4 The level of formality required for communications at RFP is specified in 1-31000-COOP-015, Communications Criteria.

5.3.7 Control and Use of Operator Aids

5.3.7.1 Operator aids are items of information located at points of use to assist operators in the performance of tasks or assignments.

5.3.7.2 Operator aids come in many forms, such as copies of procedures pages, system drawings, curves, or graphs.

- 5.3.7.3 Operations and support personnel do not use operator aids for warnings or cautions regarding personnel or equipment safety, or in place of more appropriate administrative controls such as lockout/tagout, work control forms, Nuclear Material Safety Limits, CSOLs, or accident prevention signs.
- 5.3.7.4 Operator aids may supplement approved procedures, but are not used instead of approved procedures.
- 5.3.7.5 Operator aids are a convenience to the user, not a requirement.
- 5.3.7.6 Operator aids are used to remind users of information that might otherwise be overlooked and provide guidance that is not procedural in nature.
- 5.3.7.7 Operator Aids are formally generated, authorized, and maintained.
- 5.3.7.8 Control and use of operator aids is discussed in 1-31000-COOP-010, Control of Operator Aids.

5.3.8 Operator Rounds

- 5.3.8.1 Operator rounds and round sheets are used to provide a record of events observed and action taken.
- 5.3.8.2 This record, including the routine recording of process parameters, provides an effective means of monitoring the status and performance of operating equipment.
- 5.3.8.3 Requirements concerning operator rounds are contained in 1-31000-COOP-012, Shift Operating Rounds.

5.3.9 Internal Surveillance

- 5.3.9.1 Supervisors and managers observe operations activities to monitor operating performance.
- 5.3.9.2 Deficiencies or problems noted during these observations are documented, trended, and corrected.
- 5.3.9.3 Requirements controlling this activity are contained in 1-31000-COOP-002, Internal Surveillance Program.

5.4 Maintaining and Controlling System Operability

5.4.1 General

- 5.4.1.1 The safety and welfare of plant employees and the general public is the primary concern in the operation of RFP.
- 5.4.1.2 To resolve this concern, and operate the plant effectively within the regulatory guidelines, it is essential that operations personnel maintain control of equipment and systems.
- 5.4.1.3 Formality is required in various activities to maintain this control.

5.4.2 System and Equipment Operation

- 5.4.2.1 Operations and support personnel are the owners of the physical plant, equipment, and systems. With this ownership comes the responsibility and accountability for control and direction of activities affecting operation of the plant.

- 5.4.2.2 This responsibility and accountability is focused not only on activities performed by operations personnel but also any activity being performed by support organizations that could impact facility equipment, components, or systems.
- 5.4.2.3 When components require special operational control, use locks and tags on those components to allow operation only by authorized personnel.
- 5.4.2.4 Requirements controlling the use of locks and tags are in 1-15320-HSP-2.08, Lockout/Tagout.
- 5.4.2.5 The SM has authority for RFP operations and authority is transferred only through a formal relief and turnover process.
- 5.4.2.6 If a special test, evolution, or abnormal condition arises, facility personnel are aware that the responsibility and authority to determine corresponding operating conditions, system alignments, or equipment manipulations rests with the SM.
- 5.4.2.7 The SM will not permit any individual to bypass or overrule his operational judgment without bringing the matter to the attention of senior management.
- 5.4.3 **Response to Alarms**
 - 5.4.3.1 Alarms are warning features designed to advise operations personnel of a situation that is outside normal parameter boundaries or equipment conditions.
 - 5.4.3.2 Alarms might be grouped together in control areas or might be located remotely throughout the facility.

- 5.4.3.3** The following criteria apply to routine alarm response:
- 5.4.3.3.1** The operator performs actions specified by the applicable alarm response procedures.
 - 5.4.3.3.2** Scans for any other actuated alarms.
 - 5.4.3.3.3** Takes special notice of (in writing if necessary) and acknowledging all actuated alarms.
 - 5.4.3.3.4** Takes appropriate actions to monitor equipment for abnormal conditions.
 - 5.4.3.3.5** Evaluates interrelationships between the alarming conditions, other facility parameters, and system arrangements.
 - 5.4.3.3.6** Notifies shift management of any abnormal or unexpected alarms after immediate actions have been taken and the abnormal or unexpected condition has been stabilized.
 - 5.4.3.3.7** Documents alarm actuation and actions taken in the chronological log.
 - 5.4.3.3.8** Shift management ensures that abnormal alarms are logged on the systems status board.
 - 5.4.3.3.9** The SM ensures that any abnormal alarm status is discussed with oncoming shift personnel in the shift turnover meeting.

5.4.3.4 The following criteria apply to emergency alarm response:

- 5.4.3.4.1** The operator takes whatever immediate action is necessary to place the facility in a safe condition and to protect equipment, personnel, and public safety.
- 5.4.3.4.2** Notifies the SM of the circumstances after immediate actions have been taken and the emergency condition has been stabilized.
- 5.4.3.4.3** Performs actions as specified by alarm response procedures.
- 5.4.3.4.4** Documents any actions taken in the chronological log.

5.4.3.5 The following criteria apply to nuisance alarms:

- 5.4.3.5.1** Occasionally conditions might occur that cause an alarm to be actuated repeatedly for a condition that is known and understood by shift operations personnel. These are referred to as nuisance alarms.
- 5.4.3.5.2** Repetitive nuisance alarms could result from one or more of the following conditions:
 - (1) Parameter oscillations at the vicinity of the alarm set point
 - (2) Faulty equipment
 - (3) Maintenance, test, or trouble investigation work being performed on associated equipment or devices
- 5.4.3.5.3** Repetitive nuisance alarm actuation is an undesirable operator distraction and might mask actual or meaningful alarms.

5.4.3.5.4 The responsible operator reports nuisance alarms to the SM.

5.4.3.5.5 The SM ensures remedial operational or maintenance actions are initiated to eliminate the source of the nuisance alarm signal.

5.4.3.5.6 Nuisance alarms may be deactivated in accordance with 1-31000-COOP-017, Controlled Deactivation of Alarms.

5.4.3.6 The following criteria apply to loss of alarms:

5.4.3.6.1 It is possible that an equipment malfunction or equipment damage could result in the loss of one or more alarms.

5.4.3.6.2 The actions taken in response to a loss of alarms are dictated by the particular alarms that might be rendered inoperable.

5.4.3.6.3 Operations and support personnel evaluate the impact of the inoperable alarms on the current facility condition.

5.4.3.6.4 Depending on the severity of the situation, operations and support personnel:

.1 Initiate maintenance action in accordance with IWCP.

.2 Inform the SM.

.3 Increase local monitoring of affected parameters.

.4 Provide additional operators to monitor affected parameters.

5.4.3.6.4.5 Terminate any operation or process where those operations could cause an alarm actuation on the alarm which is inoperable.

.6 Initiate the Emergency Plan, if appropriate.

5.4.3.6.5 Complete an Alarm Deactivation Request within 24 hours for any loss of alarm.

5.4.3.7 Instructions to deactivate alarms due to system malfunction, maintenance activities, or other activities not associated with routine equipment cycling or replacement are contained in 1-31000-COOP-017, Controlled Deactivation of Alarms.

5.4.4 Response to Indications

5.4.4.1 Shift operations personnel believe the information displayed by instruments, charts, printouts, valve indications, and alarms and act accordingly until they are proven to be inaccurate.

5.4.4.2 If there is doubt concerning the accuracy or appropriateness of a display, take the following actions:

5.4.4.2.1 The operator notifies the SM of the suspected indication and why the information is considered to be inaccurate.

5.4.4.2.2 Notifies the SM in a time frame that is consistent with the importance of the situation.

5.4.4.2.3 The SM determines the need to notify higher levels of management.

- 5.4.4.2.4 Shift operations personnel compare, if possible, the information that is being displayed by the suspect device to another device monitoring the same parameter.
- 5.4.4.2.5 Initiate an investigation of the device displaying unusual or abnormal information.
- 5.4.4.2.6 If the status of the device cannot be determined until facility conditions change, the SM determines if such changes can be made safely without the suspect device.
- 5.4.4.2.7 If the display is proven to be inaccurate, shift operations personnel identify the deficient device and initiate corrective action.
- 5.4.4.2.8 The SM reviews the impact of the faulty display on the facility in accordance with the OSRs.
- 5.4.4.2.9 Identifies the deficient device to operations and support personnel using deficiency tags, chronological logs, operator round sheets or shift turnover briefings to prevent any subsequent confusion.
- 5.4.4.2.10 Determines if facility conditions should be stabilized or limits established on facility changes until all aspects of the instrument failure are understood and compensatory actions are established.
- 5.4.4.2.11 Ensures plant, personnel, and environmental safety above plant production.

- 5.4.4.1.12 If an operating procedure, surveillance, or routine test requires use of a device which is out of service or faulty, the operator performing the procedure informs SM of the situation.
- 5.4.4.1.13 Operations and support personnel do not rely on interlocks to prevent entry into an area of unsafe operating conditions.
- 5.4.4.1.14 The SM determines the proper course of action to be followed. Examples of appropriate action include:
- (1) Stop the activity until the faulty device is repaired.
 - (2) Prepare a procedure change to allow use of redundant devices.
 - (3) Prepare a procedure change to allow use of a device to monitor a different parameter.
 - (4) Proceed with the evolution without use of the parameter.
 - (5) If it is appropriate to continue a test, the test is clearly annotated to identify the faulty data and device.
 - (6) Install an alternate temporary device that satisfies the requirements.

5.4.5 Configuration Control

- 5.4.5.1 Formal guidance is established to control equipment and system status to ensure proper configuration is maintained.

- 5.4.5.2 The RFP Plant Policy 9-10 calls for a Configuration Change Control Program (CCCP) which provides an integrated quality management work control process that uses a systematic, graded approach for controlling all changes to the configuration of facilities, systems, processes, safety related software, and site grounds. This process ensures modifications are within scope and budget, technically appropriate and safety executed, and that configuration documents are accurately updated, all in accordance with appropriate DOE and industry consensus standards. The Conduct of Engineering Manual (COEM), Integrated Work Control Program (IWCP), and Conduct of Maintenance (COM) integrate with CCCP to ensure consistency of plant configuration changes.

93-PCN-000285

93-PCN-000285

- 5.4.5.3 Operations and support personnel ensure that operations activities, and support activities performed by other organizations, are conducted in accordance with the requirements specified in the CCCP.
- 5.4.5.4 Use the RFP IWCP, and COEM manuals which are invoked by CCCP, for all modifications to the RFP facility configuration.
- 5.4.5.5 Include the installation of temporary modifications such as electrical jumpers, lifted leads, temporary pipe supports, and disabled relief or safety valves as part of the CCCP and implement these modifications in accordance with the Temporary Modification Control Process in the RFP CCCP Manual.
- 5.4.5.6 The CCCP initiates changes that ensure operations personnel receive the latest revisions of engineering drawings and procedures.
- 5.4.6 **Off Normal Conditions**
 - 5.4.6.1 When equipment, components, or systems are not fully functional, operations personnel:
 - 5.4.6.1.1 Ensure the facility is operated within the envelope of safety defined in the FSAR by compliance with the OSRs.
 - 5.4.6.1.2 If an approved work control document is not required, take prompt action to identify and correct the off normal condition.
 - 5.4.6.2 When operations and support personnel cannot complete the correction, notify the SM and initiate corrective action.

- 5.4.6.3 Determine the type of corrective action to be taken by evaluating the equipment involved, the nature of the condition, and the operational status of the facility.
- 5.4.6.4 Handle deficiencies that modify the facility in accordance with the IWCP.
- 5.4.6.5 Use work control, caution, or information tags to reduce the chance of redundant problem reporting and help to identify the equipment to personnel assigned to correct the problem.
- 5.4.6.6 Communicate the existence of deficient equipment to operations personnel using deficiency logs, work control or out of commission tags, work control forms, chronological logs, operator round sheets, or shift turnover briefings.
- 5.4.7 **Compliance with Operating Limits**
 - 5.4.7.1 The safety analysis documented in the FSAR describes the basis for controls that eliminate, confine, or mitigate the consequences of hazards to safe operation at RFP.
 - 5.4.7.2 As part of the FSAR, the OSRs specify the SLs, LCOs, SRs, design features, and administrative controls within which all activities are conducted.
 - 5.4.7.3 The facility is operated within the envelope of safety defined in the FSAR by compliance with these OSRs.
 - 5.4.7.3.1 Operations and support personnel maintain awareness of the status of the facility's systems and equipment with respect to the LCOs.

- 5.4.7.3.2 Written and approved procedures define actions for operations personnel to maintain facility control within the safety envelope including surveillances, test activities, and remedial actions for mitigating the consequences of exceeding the safety envelope.
- 5.4.7.3.3 The SM is responsible for recognizing situations when an event or action might cause the facility to be in a condition outside the SLs or LCOs.
- 5.4.7.3.4 The following circumstances represent events which can potentially result in the facility entering a condition outside the operating limits:
- (1) Changes in operating condition from shutdown to operation or from operation to shutdown
 - (2) Equipment deficiencies
 - (3) Evolutions and tests
 - (4) Operating error
- 5.4.7.3.5 Inform the OM of actions taken to comply with operational limit requirements and ensure that the actions taken are appropriate and correct or that they mitigate any adverse consequences to the facility.
- 5.4.7.3.6 OSR out of tolerances and violations are reported in accordance with 1-10000-ADM-16.01, Occurrence Reporting Process.

- 5.4.7.3.7 When operation of the facility falls outside operating limits, the SM ensures that actions required by the OSR are implemented in a timely manner and that appropriate actions are taken to correct the cause of the condition.
- 5.4.7.3.8 The SM notifies the OM before intentionally entering a situation where the facility operating limits will not be met, unless immediate action is required
- 5.4.7.3.9 The SM notifies the OM as soon as possible after unplanned events create a condition in which facility operating limits are not met.
- 5.4.7.3.10 The SM notifies the OM whenever the following conditions occur:
- (1) A condition exists or is suspected to exist that has the potential to adversely impact operating limits.
 - (2) An operating limit is not met.
 - (3) The facility is returned to within operating limits.
 - (4) It becomes apparent that an out-of-tolerance condition might not be cleared as anticipated.
 - (5) It is determined that the facility or any facility activity is not in compliance with operating limits.

5.4.7.4 The following criteria apply to the OSR termination of operations process:

- 5.4.7.4.1** If the OSR does not specifically delineate the scope of required termination of operations, the minimum scope of the termination is defined as the cessation of activities that directly contribute to nuclear production, bounded by the protective components or systems in an LCO out of tolerance or violation.
- 5.4.7.4.2** The OM, with necessary support from Engineering, Facility Safety, and Health and Safety, determines the scope of required termination of operations and steps necessary to return the facility to compliance with the OSR.
- 5.4.7.4.3** If a potential unresolved safety question is involved, the OM determines the scope and disposition in accordance with ADM-03.05, Nuclear Safety Evaluation Screening and Unreviewed Safety Question Determination.
- 5.4.7.4.4** The OM makes a building wide announcement to the current shift that describes the OSR out of tolerance or violation and the scope of terminated activities.
- 5.4.7.4.5** Notifies subsequent shifts of the OSR out of tolerance or violation during shift turnover meetings.

5.4.7.4.6 Identifies the specific areas, systems, and equipment affected by the termination of operations to building personnel:

- .1 Prepares, approves, and distributes a shift order or operating order that identifies the boundaries and activities affected by the termination and the activities necessary to be completed before requesting release from the termination.
- .2 Until a shift order or operating order is issued, states in SM's log book the boundaries and activities affected by the termination and the activities necessary to be completed before requesting release from termination.
- .3 When the shift order or operating order is issued, makes an entry in the SM's log book to formally transfer control of termination activities to the shift order or operating order.

5.4.7.4.7 The SM ensures the termination of affected evolutions is orderly and safe.

- .1 Documents completion of evolutions to be terminated in SM's log book.
- .2 Communicates activities involved in the safe shutdown of nuclear production to the Division Director of the Integrating Management Contractor in an expeditious manner.

5.4.7.4.8 Uses the POD to control evolutions performed while the termination of operations is in effect.

96-DMR-000790

96-DMR-000790

5.4.7.4.9

When actions necessary to return the facility to compliance with the OSR restart shall be accomplished in accordance with Conduct of Operations Chapter 20, Termination of Operations Process.

- (1) Identifies the root cause of the failure and short term corrective actions to prevent recurrence.
- (2) Includes a report prepared in accordance with 1-10000-ADM-16.01, Occurrence Reporting Process, documenting the root cause and short term corrective actions.
- (3) Includes documentation of a review of the root cause and short term corrective actions by the Operations Review Committee.

96-DMR-000790

5.4.7.5

The following criteria apply to LCO surveillance tracking:

5.4.7.5.1

A formal LCO surveillance tracking program is implemented to:

- (1) Ensure compliance with LCO surveillance frequencies.
- (2) Provide a uniform method to document LCO compliance.
- (3) Provide LCO condition status.
- (4) Provide appropriate personnel of required responses.

5.4.7.5.2

Instructions to control LCO compliance are in 1-31000-COOP-005, Limiting Conditions for Operations (LCO) Surveillance Tracking.

5.4.8 Lockout and Tagout

- 5.4.8.1 The lockout/tagout program provides administrative control to protect personnel from injury, protect equipment from damage, maintain operability of facility systems, ensure operability only by authorized personnel in a controlled fashion, and maintain the integrity of the physical boundaries of facility systems.
- 5.4.8.2 The lockout/tagout program includes placement of a lock and/or tag on an energy isolating device, in accordance with an established procedure, to indicate that the energy-isolating device and the equipment being controlled by it may not be operated until the lock and/or tag is removed.
- 5.4.8.3 At RFP, the lockout/tagout program is implemented in accordance with 1-15320-HSP-2.08, Lockout/Tagout.

5.4.9 Caution Tags

- 5.4.9.1 Operations personnel use caution tags as a precautionary measure to provide temporary special instruction or to dictate that greater than normal caution should be exercised to operate equipment.
- 5.4.9.2 Do not use caution tags to circumvent 1-15320-HSP-2.08, Lockout/Tagout.
- 5.4.9.3 Requirements regarding caution tags are in 1-31000-COOP-008, Control of Caution Tags.

5.4.10 Work Authorization

- 5.4.10.1 The POD provides a uniform and formal process to request, plan, schedule, and perform activities that have the potential to affect operations functions or processes.
- 5.4.10.2 At RFP, this formal control is implemented by 1-31000-COOP-016, Plan of the Day (POD) and the IWCP Manual.
- 5.4.10.3 The SM has authority to control work activities on shift.
- 5.4.10.4 If operating parameters dictate that a particular activity be delayed or postponed beyond the time scheduled for work through the POD process, the SM determines when it is appropriate to conduct a particular activity.
- 5.4.10.5 Maintains documentation of the status of work in progress near the SM's work station for review by operations personnel.

5.4.11 Removing Systems and Equipment from Service

- 5.4.11.1 Removing systems and equipment from service is controlled to maintain nuclear and personnel safety, avoid unauthorized operation, and avoid damage to systems and equipment.
- 5.4.11.2 Operations management controls the removal of systems and equipment from service.
- 5.4.11.3 When a system or equipment is removed from service, considers the system or equipment not operable and unable to perform its intended function.

- 5.4.11.4 If systems and equipment are removed from service and are intended to be returned to service, designates the system or equipment as OOS.
- 5.4.11.5 Systems and equipment are designated OOS for reasons such as:
- (1) Performing preventive maintenance, inspection, calibration, or special tests.
 - (2) Performing repair, rework, or replacement.
 - (3) Performing modifications.
 - (4) Performing surveillance instructions.
 - (5) When rendered inoperable by a support system.
- 5.4.11.6 If systems and equipment are removed from service and no future use or mission is identified, designates the system or equipment as OOC.
- 5.4.11.7 Before designating systems and equipment as OOS or OOC, operations personnel:
- 5.4.11.7.1 Notify and receive approval from the Shift Manager..
 - 5.4.11.7.2 Review the impact of systems or equipment to be removed from service on the OSRs.
 - 5.4.11.7.3 Do not change operating condition unless all OSRs for the operating condition are met.
 - 5.4.11.7.4 Review the impact of systems or equipment to be removed from service on operating systems or processes.

-
- 5.4.11.7.5 If required by 1-31000-COOP-014, Independent Verification, conduct an independent verification to ensure the correct equipment is removed from service.
- 5.4.11.7.6 Ensure that appropriate testing is performed before removal of systems and equipment from operable status.
- 5.4.11.7.7 If procedures are available for removing the system or equipment from service, perform the applicable procedures.
- 5.4.11.8 After a system or equipment is removed from service, use lockout/tagout methods to provide the appropriate degree of control.
- 5.4.11.9 When systems and equipment are removed from service to allow performance of surveillance procedures, complete the surveillance procedures unless technical difficulties are encountered.
- 5.4.11.10 Control the status of systems and equipment that have been removed from service by:
- (1) Maintaining OOS and OOC lists that are updated and included in the POD.
 - (2) Documenting system and equipment removals from service in chronological logs, shift turnover checklists, or operator round sheets.
 - (3) Listing OOS systems and equipment on the system status board and VSS control board if applicable.

04/25/97

5.4.12

97-DMR-000279

5.4.12

97-DMR-000279

93-DNR-000355

5.4.13 Resetting Protective Devices

- 5.4.13.1 When protective devices, such as circuit breakers and fuses, trip, attempt to understand the cause of the trip before the device is reset.
- 5.4.13.2 Operations and support personnel use good judgment and specific guidance from the SM when resetting protective devices because the consequences of inappropriately resetting protective devices varies considerably.
- 5.4.13.3 In the event of the trip of a protective device, operations personnel take the following actions:
- 5.4.13.3.1 Notify the SM.
 - 5.4.13.3.2 Determine the cause of the trip and report to the SM.
 - 5.4.13.3.3 As directed by the SM, reset the device, making a maximum of one attempt prior to determining the cause of the trip.
 - 5.4.13.3.4 Document any action taken in the appropriate chronological log, operator round sheet, or shift turnover log.

5.4.13.4 If resetting a protective device is necessary to mitigate the consequences of an emergency situation, SM approval and an investigation are not required before resetting a protective device.

5.4.13.5 When major trips and unplanned forced shutdowns occur, operations and support personnel conduct a thorough investigation.

5.4.14 Independent Verification Criteria and Requirements

5.4.14.1 A comprehensive independent verification program provides a high degree of reliability in ensuring the correct facility operation and the correct position of components such as valves, switches, and circuit breakers.

5.4.14.2 Operations and support personnel perform an independent verification on component positions that are critical to safe and reliable operation when circumstances warrant.

5.4.14.3 An independent verification program identifies:

- (1) Components to be included in the program.
- (2) Instances when independent verification is required.
- (3) Methods of performing independent verifications.

5.4.14.4 Use independent auditing of operations to confirm that established operational requirements are met.

5.4.14.5 Instructions that implement the RFP independent verification program are contained in 1-31000-COOP-014, Independent Verification.

5.4.15 Vital Safety System Status Control

5.4.15.1 The SM maintains configuration control of VSS by using status boards.

5.4.15.2 Instructions for using VSS status boards are contained in 1-31000-COOP-018, Vital Safety System Status Control.

5.5 Control and Maintenance Requirements for Operating Area Logs

5.5.1 Operations and support personnel control operating area logs and related records to ensure the maintenance of complete and accurate status and operational histories of RFP facilities.

5.5.2 Instructions to identify required facility logs and for their use, maintenance, periodic review, and disposition are contained in 1-31000-COOP-006, Operating Area Logs and Records and 1-31000-COOP-012, Shift Operating Rounds.

5.6 Abnormal Events and Notifications

5.6.1 General

5.6.1.1 Circumstances, such as occurrences, that represent problems, concerns, conditions, or events that could have a negative impact on safety receive an appropriate response including identification, notification, categorization, investigation, evaluation, tracking, reporting, trending, correction, documentation, and training.

5.6.1.2 Examples of occurrences are actual or near miss instances of exceeding OSR limits, violating procedures with potentially serious safety consequences, or VSS failures.

5.6.2 Occurrence Reporting

5.6.2.1 When a problem, concern, condition, or event is identified, operations and support personnel inform supervision or management.

5.6.2.2 Supervision or management evaluates, processes, and initiates appropriate near term remedial action.

5.6.2.3 If an event is categorized as an occurrence, required notifications are made to management and external agencies.

5.6.2.4 Consistently report occurrences to ensure that both EG&G management and DOE are kept informed of all events which could:

- (1) Affect the health and safety of the public.
- (2) Seriously impact the intended purpose of RFP facilities.
- (3) Have a noticeable adverse effect on the environment.
- (4) Endanger the health and safety of workers.

5.6.3 Occurrence Investigation and Corrective Action

5.6.3.1 If an event is categorized as an occurrence, operations management conducts an investigation according to established criteria.

5.6.3.2 Personnel with qualifications in the appropriate technical area and investigative techniques perform investigations.

- 5.6.3.3 Analysis of the collected information determines the event's impact on safety, its root cause, and the necessary corrective action to preclude or minimize the chance of recurrence.
- 5.6.3.4 Perform and submit required reports.
- 5.6.3.5 Perform and verify corrective actions.
- 5.6.3.6 Inform other RFP organizations of occurrences as part of the Lessons Learned Program.
- 5.6.3.7 If review by any organization indicates an impact on safety, determine, execute, and document needed corrective actions.
- 5.6.3.8 Instructions for investigating, processing, and correcting occurrences are contained in 1-10000-ADM-16.01, Occurrence Reporting Process.

5.7 Development and Control of Operating Procedures

5.7.1 Role of Procedures

- 5.7.1.1 The purpose of operating procedures and related support procedures is to provide appropriate direction to ensure the plant is operated safely and reliably.
- 5.7.1.2 Procedures which contribute to safe and reliable plant operation include administrative procedures such as shift relief and turnover and technical support procedures such as system operating instructions.

- 5.7.1.3 Operations and support personnel develop procedures with sufficient detail to perform the required function without direct supervision.
- 5.7.1.4 Develop procedures with consideration for the intended audience.
- 5.7.1.5 Write and revise procedures so that they can be easily used without making mistakes.
- 5.7.1.6 Use writer's guides to ensure consistency in format, content, and wording which is essential to achieving a high level of operator proficiency and performance.
- 5.7.2 **Procedure Control Program Scope**
 - 5.7.2.1 Operations and support personnel use procedure control activities to control procedures development, review, verification validation, administration, writer guidance, writer training, changes, revisions, use, and improvement.
 - 5.7.2.2 The OM ensures that required procedures are prepared, approved, and used for important activities within assigned buildings.
 - 5.7.2.3 Important activities are those required to maintain operations within the safety envelope and remedial actions for mitigating the consequences of exceeding the safety envelope.

5.7.2.4 Required procedures include but are not limited to the following types:

- (1) Operating and mission procedures for systems and equipment necessary to support the FSAR and other source document requirements including all anticipated operations, evolutions, abnormal or emergency situations
- (2) Alarm Response
- (3) Surveillance and test activities for components specified in the OSRs
- (4) Maintenance
- (5) Emergency Response
- (6) Fire Protection
- (7) Nuclear Safety (receiving, storing, processing)
- (8) Training
- (9) Radiological Protection and Control
- (10) Waste Management Program
- (11) Administrative
- (12) Quality Assurance

5.7.3 Procedure Control Requirements

5.7.3.1 Managers responsible for preparing procedures ensure the technical content of those procedures, give a high level of attention to procedure preparation, and assign trained and technically qualified writers.

93-DMR-000355

5.7.3.2 Ensure procedure content and format are consistent with RFP plantwide procedure preparation, review, approval, and writing administrative procedures as scheduled in the applicable implementation plan in accordance with 1-A01-PPG-001, Procedure Process, 1-A02-PPG-003, Procedure Writing, and 1-A03-PPG-004, Procedure Edit, Review, and Comment.

5.7.3.3 Procedure preparation, review, and approval administrative procedures require:

- (1) Review for technical accuracy and appropriate human-factor considerations including comparison to source documents to verify accuracy.
- (2) Validation of new procedures by facility walkdown, simulated walkdown, or mockup to ensure workability.
- (3) Approval of operating, test, and alarm response procedures by the OM.

5.7.3.4 Managers responsible for preparing procedures control the review and approval process as required by sitewide procedure preparation, review, approval, and writing administrative procedures.

5.7.3.5 Document control procedures require:

- (1) Controlled distribution to document holders based on predetermined distribution lists.
- (2) Destruction or marking of outdated versions to prevent inadvertent use.
- (3) Control of working copies by verification of proper revision prior to work.

5.7.3.6 Managers responsible for controlling the use of procedures ensure the procedures are controlled to preclude the use of outdated copies by complying with 1-48000-DM-001, Document Control Program.

5.7.4 Procedure Revisions and Changes

- 5.7.4.1 Revisions represent permanent modifications to a procedure. Revisions are typed, reflect a new revision number, and replace the past revision.
- 5.7.4.2 Changes address immediate needs to permit continued operations or to protect plant personnel or equipment.
- 5.7.4.3 Procedure changes intended for use more than one time and all revisions are distributed in accordance with 1-48000-DM-001, Document Control Program.
- 5.7.4.4 Changes are included in procedure copies used by operators.
- 5.7.4.5 Instances for which changes and revisions are necessary include:
- (1) Operating practices change.
 - (2) Requirements change.
 - (3) Identification of inadequacies or errors.
 - (4) Permanent or temporary facility modifications.
 - (5) Conduct of periodic reviews and assessments.
- 5.7.4.6 Procedure revisions are initiated based on the number and duration of change notices and revision requests.
- 5.7.4.7 All currently effective procedure changes are incorporated during the next procedure revision.

94-DNR-001411

5.7.4.8 Procedure changes and revisions, if required for temporary or permanent facility modifications, are implemented when returning the system/equipment to service or operability. The Building Operations Manager ensures new or revised procedures, designated as required for Return to Service, have been received.

5.7.4.9 Procedures that control the change and revision process meet the following requirements.

- (1) Use the same depth of review and level of approval for new procedures and their subsequent revisions.
- (2) Provide a definition for changes and revisions which modify the intent of the procedure.
- (3) Specify required reviews for intent and non-intent changes and revisions.
- (4) Specify verification and validation requirements for changes and revisions.
- (5) Ensure changed or revised steps are compared with the source documents.
- (6) Ensure reasons for step changes from initial preparation are documented.
- (7) Specify Operations Review Committee review requirements.
- (8) Provide means to inform operations and appropriate support personnel that a procedure was changed or revised.

5.75 Temporary Procedures

5.7.5.1 Operations that are projected to last less than 90 days may be controlled using temporary procedures.

5.7.5.2 Operations and support personnel do not use an expired temporary procedure to control operations under any circumstance.

- 5.7.5.3** If operations controlled by temporary procedures are projected to continue past the procedure's expiration date:
- (1) A revision or change to the temporary procedure is required to extend the expiration date of the procedure.
 - (2) Submit the temporary procedure revision or change in a time frame such that the temporary procedure does not expire before the curtailment of operations.

5.7.6 Periodic Review and Improvement Program

- 5.7.6.1** The OM ensures a documented periodic review of procedures under his control as required by sitewide procedure preparation, review, and approval administrative procedures.
- 5.7.6.2** Document Management maintains a tracking system for periodic reviews to notify responsible managers of reviews coming due and past due.
- 5.7.6.3** Periodic review requirements are satisfied by revisions of procedures that involve a complete review of the procedure.
- 5.7.6.4** The OM reviews procedures after occurrences in accordance with 1-10000-ADM-16.01, Occurrence Reporting Process.
- 5.7.6.5** A formal process is established to provide user input, feedback, and recommendations for procedures improvement in the sitewide procedure preparation, review, and approval administrative procedures.

5.8 Component Labeling

- 5.8.1 Clear labeling improves the ability of operations and support personnel to positively and quickly identify system components and enhances training effectiveness.
- 5.8.2 Clear labeling minimizes the potential for equipment identification errors and reduces exposure of personnel to radiation and other hazards.
- 5.8.3 A labeling program is established to control the labeling process throughout the life of RFP.
- 5.8.4 Operations and support personnel use the labeling program to identify components needing labels and to ensure:
- (1) Systems, components, and equipment are labeled to allow operations personnel go positively identify equipment to be operated.
 - (2) Labels are correct and placed on proper equipment.
 - (3) Labeling deficiencies are promptly identified and corrected.
 - (4) Damaged or missing labels are replaced.
- 5.8.5 Specification, design, requesting, and installation requirements for labels at RFP are contained in SX-164, Standard for Facility System and Component Identification and Labeling.

93 DMR-000355 95 DMR-000023

5.9 Operational Safety Requirements (OSR) Revision Implementation Plans

5.9.1 OSR Revision Implementation Plans provide Operations with:

- (1) Assurance that adequate evaluations of proposed activities are performed.
- (2) Assurance that hardware, procedures, and training are evaluated for the ability to support effective accomplishment of the overall implementation of the OSR revisions.
- (3) Assurance that the facility is not operated in an out-of-tolerance condition due to the premature distribution of an OSR revision.

5.9.2 OSR Revision Implementation Plans are required for all revisions.

5.9.2.1 All affected groups inform the Operations Manager of work to be performed and the work schedule from which the Operations Manager establishes an integrated implementation date.

5.9.3 Nuclear Safety Engineering submits proposed OSR revisions to DOE RFO for review and approval.

5.9.4 When the proposed OSR revision has been submitted to and when approved by DOE RFO, Nuclear Safety Engineering notifies the affected Operations Manager.

5.9.5 Operations Manager notifies the affected Responsible Manager to evaluate activities based on the Operations Manager's integrated implementation date and the proposed OSR revision. Responsible Manager evaluates the following:

- (1) Maintenance review of all outstanding maintenance activities required for implementation, including preventive maintenance orders.

93-DNR-000355

5.9.5 (continued)

- (2) Operations update of the operating procedures, surveillance procedures, alarm response procedures, and the LCO Surveillance Tracking System database.
- (3) Operations Training Coordinator identifies Qualification Standard Package (QSP) changes required and the training required to implement the revision.
- (4) Nuclear Safety Engineering evaluates the need to revise CSOLs.
- (5) Design Engineering evaluates the need to revise existing engineering documents.
- (6) Systems Engineering evaluates the need to revise engineering operability evaluations and modifications in progress or planned.
- (7) Plant Procedure Group develops a schedule to revise operating, surveillance, alarm response, preventive maintenance, or other procedures as needed.
- (8) Performance Based Training evaluates OSR revisions against training programs and modifies training material as required in accordance with 1-10000-TUM.

5.9.6 Operations Manager establishes an integrated implementation schedule for OSR revisions based on the evaluation responses.

5.9.7 If any implementation action cannot begin until after the OSR revision is implemented, or requires completion after the OSR revision is implemented, all organizations indicate proposed pre-implementation and post-implementation requirements to the Operations Manager.

5.9.8 When informed of satisfactory completion of the pre-implementation activities, the Operations Manager notifies Nuclear Safety Engineering to issue the OSR revision with an effective date that ensures controlled distribution of the OSR revision before implementation.

93-DNR-000355

93-DMR-000355

- 5.9.9 When notified by the Operation's Manager, Nuclear Safety Engineering distributes the OSR revision.
- 5.9.10 The Operation's Manager verifies completion of any post-implementation plan activities that remain after implementation of OSR revisions.
- 5.9.11 The Operation's Manager notifies DOE RFO, through the AGM/GM as required, that OSR revision implementation is complete.

6. RECORDS

- 6.1 Documentation of required reading is retained by the OM, SM, or designee for one year.

6.2 The following records related to determining the LOA are retained by the OM in accordance with the RFP Records Management Manual and the RFP Quality Assurance Manual:

- (1) Risk Evaluation Form
- (2) LOA Validation Form
- (3) LOA Validation Comment Sheet

7. REFERENCES

- 7.1 ADM-03.05, Nuclear Safety Evaluation Screening and Unreviewed Safety Question Determination
- 7.2 APNO-3, Process Pre-Operational Functional Testing
- 7.3 DES-6, Control of Engineering Drawings
- 7.4 DES-8, Master Drawing System
- 7.5 DES-9, Drawing Identification
- 7.6 DES-41, Engineering Document Distribution Chart
- 7.7 DES-69, Labeling Facility System Components and Equipment
- 7.8 DOE 5000.3A, Occurrence Reporting and Processing of Operations Information
- 7.9 DOE 5480.5, Safety of Nuclear Facilities
- 7.10 DOE 5480.11, Radiation Protection for Occupational Workers

- 7.11 DOE 5480.19, Conduct of Operations Requirements for DOE Facilities
- 7.12 DOE 5480.20, Personnel Selection, Qualification, and Training Requirements
- 7.13 DOE 5483.1A, Occupational Safety and Health Program for DOE Contractor-Operated Facilities
- 7.14 I-EP-04.01, Event Categorization
- 7.15 Integrated Work Control Program Manual
- 7.16 Maintenance Procedures Manual
- 7.17 Nuclear Safety Material Safeguards Manual, Material Accountability
- 7.18 Onsite Transportation Manual, Material Accountability
- 7.19 Plutonium Operations Resumption Operational Safety Requirements Building 559
- 7.20 Radiological Operating Instructions Manual, Handling, Storage, and Marking of Radiation Waste and Radiation Material
- 7.21 RFP Configuration Change Control Program Manual
- 7.22 RFP Emergency Plan
- 7.23 RFP Policy 7-23, Self Assessment
- 7.24 RFP Quality Assurance Manual
- 7.25 RFP Records Management Manual

7.26 RMP-6.01, Resumption Document Control

7.27 SX-164, Standard for Facility System and Component Identification and Labeling

7.28 1-10000-ADM-16.01, Occurrence Reporting Process

93-DNR-000355 | 7.29 1-10000-ADM-16.05, Lessons Learned

7.30 1-10000-TUM, Training User's Manual

93-DNR-000355 | 7.31 1-11000-ADM-16.03, Cause Analysis

7.32 1-11000-ADM-16.06, Conduct of Critiques

7.33 1-11000-ADM-16.10, Self Evaluation

93-DNR-000355 | 7.34 1-A01-PPG-001, Procedure Process

7.35 1-A02-PPG-003, Procedure Writing

93-DNR-000355 | 7.36 1-A03-PPG-004, Procedure Edit, Review, and Comment

7.37 1-15320-HSP-2.08, Lockout/Tagout

7.38 1-31000-COOP-002, Internal Surveillance Program

7.39 1-31000-COOP-003, Control of On-Shift Training

7.40 1-31000-COOP-004, Vital Safety System Operational Status

- 7.41 1-31000-COOP-005, Limiting Conditions for Operations (LCO) Surveillance Tracking
- 7.42 1-31000-COOP-006, Operating Area Logs and Records
- 7.43 1-31000-COOP-007, Shift Relief and Turnover
- 7.44 1-31000-COOP-008, Control of Caution Tags
- 7.45 1-31000-COOP-010, Control of Operator Aids
- 7.46 1-31000-COOP-011, Pre-Evolution Briefings
- 7.47 1-31000-COOP-012, Shift Operating Rounds
- 7.48 1-31000-COOP-013, Shift, Standing, and Operations Orders
- 7.49 1-31000-COOP-014, Independent Verification
- 7.50 1-31000-COOP-015, Communications Criteria
- 7.51 1-31000-COOP-016, Plan of the Day (POD)
- 7.52 1-31000-COOP-017, Controlled Deactivation of Alarms
- 7.53 1-31000-COOP-018, Vital Safety System Status Control
- 7.54 1-48000-DM-001, Document Control Program
- 7.55 1-50000-ADM-15.01, Control of Nonconforming Items

- 95-DMR-000418
-
- 7.56 1-5000-ADM-15.03, Deficiency Report System
 - 7.57 1-77000-RM-001, Records Management Guidance for Records Sources
 - 7.58 2-F30-COEM-DES-225, Baseline Document Change Process

04/25/97

97-DMR-000279

09/17/93

DELETED BY 93-DMR-000355

09/17/93

DELETED BY 93-DMR-000355

09/17/93

DELETED BY 93-DMR-000355

09/17/93

DELETED BY 93-DMR-000355

09/17/93

DELETED BY 93-DMR-000355

Rocky Flats Plant 1-31000-COOP-002

REVISION 0

INTERNAL SURVEILLANCE PROGRAM

APPROVED BY: [Signature] 11/09/92 Responsible Organization: Plutonium Production
General Manager, Date
Rocky Flats Plant

Effective Date: October 27, 1992

CONCURRENCE:

/s/ G. E. Marx 9/3/92
Associate General Manager, Date
Administration and Planning

/s/ H. S. Berman 9/17/92
Associate General Manager, Date
Engineering

/s/ J. M. Kersh 9/4/92
Associate General Manager, Date
Environmental Restoration Management

/s/ J. M. Kersh 9/4/92
Associate General Manager, Date
Environmental and Waste Management

/s/ E. H. Ideker 9/2/92
Associate General Manager, Date
Facility Management and Operations

/s/ D. W. Ferrera 9/10/92
Associate General Manager, Date
Maintenance and Plant Support

/s/ L. C. Smith for J. G. Davis 9/17/92
Associate General Manager, Date
Performance and Quality Assurance

/s/ J. H. Riley 9/18/92
Associate General Manager, Date
Plant Safety and Security

100000
[Signature] 11/06/92
Site Operations Review Committee Chairman Date

[Signature] 9/5/92
Subject Matter Expert Date

AFFECTS PLANT SAFETY
PROCEDURE USE CATEGORY 3

CONTROLLED COPY

The following PRRs have been incorporated in this revision:
92-PRR-000226

PADC-92-00443

This procedure supersedes procedure COOP-002, Revision 1.

Reviewed for Classification

By [Signature] UNU-

Date 10-6-92

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
TITLE	1
TABLE OF CONTENTS	2
1. PURPOSE	3
2. SCOPE	3
3. DEFINITIONS	3
4. RESPONSIBILITIES	4
4.1 Operations Manager	4
4.2 Supervisory Personnel Conducting Internal Surveillance	5
4.3 Operations and Support Personnel	5
5. INSTRUCTIONS	6
5.1 Internal Surveillance Program Development	6
5.2 Internal Surveillance Conduct and Documentation	6
5.3 Review and Disposition	10
6. RECORDS	12
7. REFERENCES	12
<u>Appendices</u>	
Appendix 1, Internal Surveillance Flow Chart	14
Appendix 2, Activities and Evolutions for Internal Surveillances	15
Appendix 3, Sample Internal Surveillance Form	16
Appendix 4, Sample Deficiency Continuation Sheet	17
Appendix 5, Sample Good Practices Form	18
Appendix 6, Sample Potential Areas for Improvement Form	19
Appendix 7, Generic Procedure Checklist	20
Appendix 8, Generic ALARA Checklist	22
Appendix 9, Generic Housekeeping Checklist	23
Appendix 10, Generic Calibration Checklist	24

1. **PURPOSE**

- 1.1 This procedure describes the process for conducting management internal surveillance of activities at Rocky Flats Plant (RFP) facilities to help ensure operations are safely and efficiently performed.

2. **SCOPE**

- 2.1 This procedure provides methods for conducting, documenting, reporting, and determining corrective actions for internal surveillance of operating and support activities and evolutions at RFP facilities under the cognizance of Operations Managers (OMs).
- 2.2 The internal surveillance program is not intended to supersede, replace or diminish:
- (1) The frequent, direct observation of operations activities by supervisors and managers which is essential to safe and efficient operations.
 - (2) The Nuclear Safety program audit requirements.
- 2.3 The performance of this procedure will fulfill portions of the Self-Evaluation Program when reported in accordance with 1-11000-ADM-16.10.

3. **DEFINITIONS**

- 3.1 **Activity**. Any administrative, maintenance, radiological, or production work function conducted by personnel under the cognizance of the OM.
- 3.2 **Evolution**. Any activity or event planned and scheduled to ensure that all associated health, safety, and environmental aspects have been identified and satisfactorily addressed.

3.3 **Internal Surveillance**. Observation conducted by supervisory personnel of activities and evolutions in order to:

- (1) Ensure procedures are adequate and personnel are appropriately trained.
- (2) Document and correct observed deficiencies.
- (3) Document observed good practices for general use.

4. RESPONSIBILITIES

4.1 Operations Manager

- 4.1.1 Designates areas, processes, personnel, and evolutions to be included in the internal surveillance program.
- 4.1.2 Assigns supervisory personnel to conduct internal surveillances.
- 4.1.3 Coordinates internal surveillance participation by supervisory personnel from other departments.
- 4.1.4 Develops and posts a schedule of internal surveillances at least quarterly.
- 4.1.5 Reviews completed internal surveillance reports to ensure:
 - (1) Notifications of identified good practices are made to encourage general use.
 - (2) Corrective action, such as addressing the root cause, for identified deficiencies is initiated.
 - (3) Corrective action for identified deficiencies is tracked until completion.

- 4.1.6 Retains schedules, completed reports, and other internal surveillance records until their transfer to permanent storage.

4.2 Supervisory Personnel Conducting Internal Surveillance

- 4.2.1 Perform assigned internal surveillances.
- 4.2.2 Ensure corrective actions are initiated and implemented for observed deficiencies.

4.3 Operations and Support Personnel

- 4.3.1 Ensure internal surveillance by supervisory personnel has no adverse affect on activities and evolutions.
- 4.3.2 Respond professionally to questions from supervisory personnel during internal surveillances.
- 4.3.3 Direct supervisory personnel to the appropriate source if a question requires a detailed answer or causes a potential distraction.

5. INSTRUCTIONS

NOTE

An overview of the Internal Surveillance Program process is shown in Appendix 1, Internal Surveillance Flow Chart.

5.1 Internal Surveillance Program Development

- 5.1.1 The OM determines facility activities and evolutions subject to internal surveillance scheduling.
- 5.1.2 Ensures the Internal Surveillance Program includes provisions for observing:
 - (1) Operations and support personnel under the OM's cognizance.
 - (2) A representative cross section of activities and evolutions performed in the facility. (See Appendix 2, Activities and Evolutions for Internal Surveillances for examples.)
- 5.1.3 Develops and posts, in an area accessible to facility operations and support personnel, a schedule of internal surveillances to be performed for the upcoming period (at least quarterly).

5.2 Internal Surveillance Conduct and Documentation

- 5.2.1 Supervisory personnel prepare for assigned internal surveillances:
 - 5.2.1.1 Obtain:
 - (1) Internal Surveillance Form. (See Appendix 3, Sample Internal Surveillance Form.)
 - (2) Deficiency Continuation Sheets. (See Appendix 4, Sample Deficiency Continuation Sheet.)

5.2.1.1 (continued)

- (3) Good Practices Form. (See Appendix 5, Sample Good Practices Form.)
- (4) Potential Areas for Improvement Form. (See Appendix 6, Sample Potential Areas for Improvement Form.)

5.2.1.2 Select items to be observed that pertain to the activities to undergo surveillance from the:

- (1) Current revision of applicable procedures, specifications, processes sheets, or other documents related to the activities to be observed.
- (2) Generic checklists. (See sample forms in Appendix 7, Generic Procedure Checklist, Appendix 8, Generic ALARA Checklist, Appendix 9, Generic Housekeeping Checklist, and Appendix 10, Generic Calibration Checklist.)

5.2.1.3 Schedule the internal surveillance based on the activity/evolution performance schedule.

5.2.1.4 Notify the OM if the internal surveillance could not be performed.

5.2.2 Surveillances of the assigned activities and evolutions include:

- (1) Arrival at the location for the internal surveillance before the scheduled time.
- (2) Introduction of the participants.
- (3) Description of the observation to be made.
- (4) Verification that the intended observations can be made without adverse impact on the subject activities and evolutions.
- (5) Observations that are conducted in a manner that is professional and nonconflicting with an operator's ability to manipulate controls, observe instrumentation, or otherwise impair operating capability.

5.2.2 (continued)

- (6) Observations and questions until completion of the activities and evolutions or until a sufficient amount of information has been gathered to ensure an adequate evaluation.
- (7) Completion of items from prepared checklists.
- (8) Use of objective evidence (including instrument readings, documents used by the personnel under observation, and installed alarms) to obtain required data.
- (9) Actions, including notifying participants and supervision, if safety or quality concerns arise from observed conditions or activities. Such actions are consistent with the severity of the identified safety or quality concerns.

5.2.3 Document the observations on the Internal Surveillance Forms.

- 5.2.3.1 Document observed deficiencies, for example Deficiency Report or Nonconformance Report (NCR), in accordance with 1-74000-IWCP-1, Work Control Form Processing and 1-50000-ADM-15.01, Control of Nonconforming Items.
- 5.2.3.2 List, by appropriate identifier or description, any items that require generation of a Deficiency Report or an NCR.
- 5.2.3.3 List all cases of procedural noncompliance as deficiencies.
- 5.2.3.4 List all checklist items that indicate deficiencies.

- 5.2.4 Document potential areas for improvement on the Internal Surveillance Form including procedure or other changes that could result in improved readability, user comprehension, safety, end-product quality, or other areas of enhancements such as:
- (1) ALARA programs.
 - (2) Training [on the job training (OJT), classroom or continuing].
 - (3) Job task performance.
 - (4) Briefings.
- 5.2.5 Describe any good practices observed on the Internal Surveillance Form.
- 5.2.6 Complete the Internal Surveillance Form. (See Appendix 3.)
- 5.2.6.1 Enter other appropriate data, sign and date form.
- 5.2.6.2 Prepare a distribution list for the completed form; including functional managers who have responsibilities for or who might benefit from a knowledge of observed deficiencies or good practices, and Quality Assurance (QA); and enter the distribution list in the Copies to: Section on the form.
- 5.2.6.3 Submit the original form to the OM, and distribute copies to personnel on the distribution list.

5.3 Review and Disposition

- 5.3.1 The OM reviews all internal surveillance reports, including completed Internal Surveillance Forms.
- 5.3.1.1 Defines corrective action for each listed deficiency on the Internal Surveillance Form.
- 5.3.1.2 Determines proper corrective action by performing the following, as a minimum:
- (1) Following the appropriate procedures, such as 1-74000-IWCP-1
 - (2) Consulting with additional personnel as necessary
 - (3) Addressing the root cause evaluation in accordance with 1-10000-ADM-16.03; Root Cause Analysis
- 5.3.1.3 Tracks corrective action initiated to ensure all observed deficiencies are cleared in a timely manner.
- 5.3.1.4 Implements recommendations and disseminates information on observed good practices to appropriate personnel.
- 5.3.1.5 If an internal surveillance is used to satisfy the requirements for a scheduled Self-Evaluation, documents by issuing a report to the appropriate Associate General Manager (AGM) defining results, and forwards a copy of the report to Performance and Quality Assurance Self-Evaluation Program Manager in accordance with 1-10000-ADM-16.10, Self-Evaluation Program.

- 5.3.1.6 If it is determined that a finding, lessons learned, or observed good practice from a scheduled internal surveillance would benefit another organization, submits this information to sitewide Lessons Learned Program Manager.
- 5.3.1.7 Signs and dates the report to document corrective action has been completed.
- 5.3.2 Ensures all internal surveillance reports are reviewed semiannually.
 - 5.3.2.1 Analyzes deficiency types, severity, occurrence, frequencies, and root causes to determine if trends exist.
 - 5.3.2.2 Incorporates additional internal surveillances into the schedule for activities and evolutions identified that have not yet undergone internal surveillance or for which additional observation is needed.
 - 5.3.2.3 Takes appropriate corrective action for adverse or recurring trends.
 - 5.3.2.4 Distributes a list of consecutive deficiencies to the General Manager, AGMs, and other managers.
 - 5.3.2.5 Ensures spot-checks to verify the adequacy of prescribed corrective actions are performed and results are documented and receive OM review.

6. RECORDS

6.1 The OM maintains the following in accordance with the RFP Records Management Manual and the RFP Quality Assurance Manual:

- (1) Completed Internal Surveillance Forms
- (2) Internal surveillance schedules and assignments
- (3) The annual schedule until the next annual schedule is prepared

6.1.1 If scheduled internal surveillances are missed:

- (1) Documents the reasons.
- (2) Schedules the missed internal surveillances at an appropriate time.

6.2 In accordance with the RFP Records Management Manual and the RFP Quality Assurance Manual:

6.2.1 Provides for storage of internal surveillance records before transfer to permanent storage.

6.2.2 Processes the records into the central records system.

7. REFERENCES

7.1 Department of Energy (DOE) Order 5480.5, Safety of Nuclear Facilities

7.2 DOE Order 5480.19, Conduct of Operations Requirements for DOE Facilities

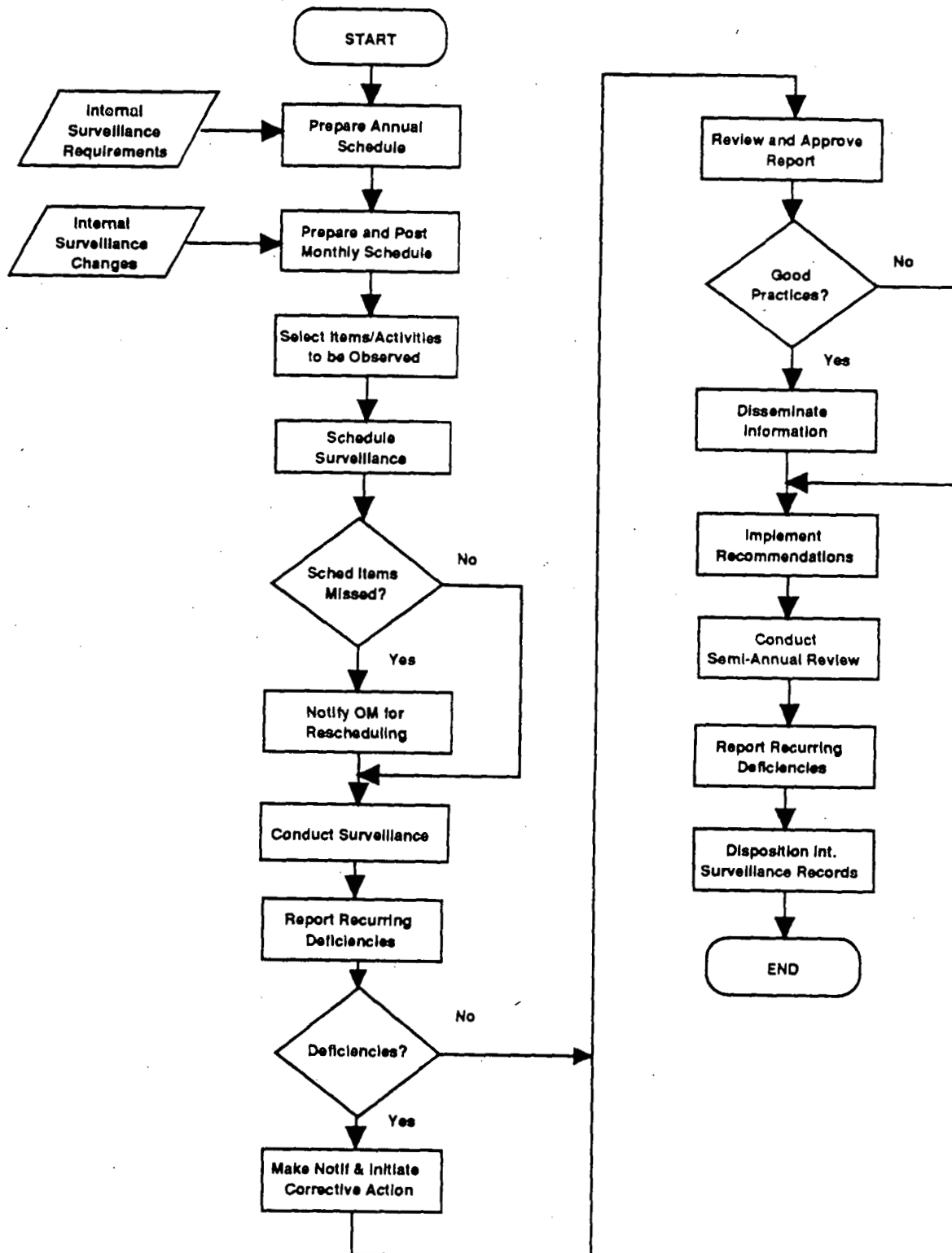
7.3 DOE Order 5481.1B, Safety Analysis and Review System

7.4 DOE Order 5700.6C, Quality Assurance Management Assessments

- 7.5 RFP Quality Assurance Manual
- 7.6 RFP Records Management Manual
- 7.7 1-10000-ADM-16.01, Occurrence Reporting Process
- 7.8 1-10000-ADM-16.03, Root Cause Analysis
- 7.9 1-10000-ADM-16.05, Implementation of Lessons Learned Program
- 7.10 1-11000-ADM-16.10, Self-Evaluation Program
- 7.11 1-31000-COOP-011, Pre-Evolution Briefing
- 7.12 1-50000-ADM-15.01, Control of Nonconforming Items
- 7.13 1-74000-IWCP-1, Work Control Form Processing

APPENDIX 1
Page 1 of 1

INTERNAL SURVEILLANCE FLOW CHART



APPENDIX 2

Page 1 of 1

ACTIVITIES AND EVOLUTIONS FOR INTERNAL SURVEILLANCES

Internal surveillances are conducted to evaluate the following types of activities and evolutions.

- (1) Plutonium Production
- (2) Plutonium Support
- (3) Evolutions as defined in 1-31000-COOP-011, Pre-Evolution Briefing
- (4) Housekeeping and Cleanup Activities
- (5) Radiological Control Surveys and Personnel Monitoring Activities
- (6) Routine Maintenance Activities
- (7) Work Activities Affecting Quality
- (8) Work Activities Affecting Safety, Health, and the Environment
- (9) On-Shift Training
- (10) Calibrations and Surveillance Tests
- (11) Problems identified in other facilities by Lessons Learned or other programs, which might also occur in the facility
- (12) Activities involving new personnel, new or revised procedures, new or modified equipment, or other activities which may have an above average potential for error.

APPENDIX 3

Page 1 of 1

SAMPLE INTERNAL SURVEILLANCE FORM

FROM: _____

_____/_____
Date / Time

TO: _____

Operations Manager, _____

SUBJECT: Internal Surveillance

The undersigned conducted an internal surveillance in Building/Area _____
from _____ to _____ on _____, 19_____
Time Time Date

The following personnel were observed: _____

The procedure, specification, process control sheet being used was:

_____/_____
Title Rev. Date

Observed deficiencies listed below (_____ continuation sheets attached.)

DEFICIENCY	CORRECTIVE ACTION DISPOSITION

The following generic checklists and documents are attached.

- ☐ Procedures ☐ ALARA ☐ Housekeeping ☐ Calibration
☐ Good Practices ☐ Potential Areas for Improvement

Signature

Printed Name/Title

Signature

Printed Name/Title

Corrective actions complete _____
Operations Manager

Copies to:

APPENDIX 4

Page 1 of 1

SAMPLE DEFICIENCY CONTINUATION SHEET

DEFICIENCY	CORRECTIVE ACTION DISPOSITION

APPENDIX 5

Page 1 of 1

SAMPLE GOOD PRACTICES FORM

Implementation of the Internal Surveillance Program revealed the following good practice(s) that might also benefit other building/facilities:

SAMPLE

TO: _____, 19 _____

FROM: _____, Operations Manager, _____

SUBJECT: Good Practice(s) Documented Above

Please review the good practice(s) described above to determine if there is any benefit to activities in your building/facility. No response is required.

Operations Manager

APPENDIX 6
Page 1 of 1

SAMPLE POTENTIAL AREAS FOR IMPROVEMENT FORM

Implementation of the Internal Surveillance Program revealed the following area for improvement:

SAMPLE

APPENDIX 7

Page 1 of 2

GENERIC PROCEDURE CHECKLIST

Attribute	Yes	No	N/A	Comments
1. Was the correct procedure being used? Title: _____				
2. Was the revision of the procedure being used correct? Rev. : _____ Date: _____				
3. Was the procedure followed?				
4. Was the procedure available at the location where the procedure or activity was performed?				
5. Were units of measure in the procedure consistent with the units of the instrumentation used?				
6. Was the user able to perform the procedure using only the stated tools, instruments, and materials?				
7. Was sufficient information (level of detail) provided to successfully complete each step?				
8. Could the user perform the procedure without obtaining additional information from persons or documents not specified by the procedure?				
9. If actions by other than the direct user of the procedure are required, did the procedure provide adequate direction for coordinating such action?				
10. Was the physical procedure easy to use (for example, not too bulky)?				
11. Was the performer trained prior to using the procedure?				
12. Was the performer qualified to perform the activity or task?				
13. Was a Pre-Evolution Briefing needed?				
14. Was a Pre-Evolution Briefing conducted?				

APPENDIX 7

Page 2 of 2

GENERIC PROCEDURE CHECKLIST (continued)

Attribute	Yes	No	N/A	Comments
15. Did the user perform each step correctly?				
16. Was the user able to follow the stated sequence to accomplish the task (no steps missing or out of order)?				
17. Could the user easily and correctly follow the referencing and branching statements?				
18. Was the procedure, including attachments, legible to the user?				
19. Could the user accurately read figures, tables, charts, and graphs?				
20. Could the user locate and identify all equipment referred to in the procedure?				
21. When the procedure steps are taken that involve or may affect plant safety limits (OSA/OSR/LCO), are these steps and limits clearly identified and communicated to the user?				
22. Are emergency actions adequately defined in the procedure?				
23. Were building numbers, elevations, telephone numbers, and other data in the procedure accurate?				
24. Were referenced documents such as manuals and data sheets available for use?				

APPENDIX 8

Page 1 of 1

GENERIC ALARA CHECKLIST

Attribute	Yes	No	N/A	Comments
1. Did it appear that personnel are familiar with applicable procedures and tasks to be performed?				
2. Did it appear that personnel were familiar with the work areas?				
3. Were personnel aware of the area radiation levels and the low dose areas?				
4. Were personnel aware of their current exposure and how much additional dose they were allowed to receive?				
5. Were personnel wearing required dosimetry?				
6. Were Health Physics Personnel/ Radiation Protection Technicians available at the work site if required?				
7. Was the use of shielding maximized for this task and adequately addressed for this task in the work package or procedure?				
8. Were protective clothing requirements adhered to?				
9. Were all the necessary tools and materials available at the work locations to minimize entry/exit?				
10. Was the area ready prior to start of work, (interferences removed, systems shutdown and tagged)?				
11. Are high radiation areas (>1000 mrem/hr) posted and locked/ roped-off)?				
12. Are friskers operational and did personnel frisk?				

APPENDIX 9

Page 1 of 1

GENERIC HOUSEKEEPING CHECKLIST

Attribute	Yes	No	N/A	Comments
1. Is the area sufficiently free from trash, scrap, litter, and combustible material?				
2. Is the area ventilated and appropriately lighted?				
3. Has the area been appropriately isolated to minimize effects from dust, noise, rain, and welding?				
4. Are fire prevention and protection equipment unobstructed and accessible?				
5. Are individuals observing industrial safety requirements?				
6. Is the work area free of excessive accumulation of power leads, welding leads, equipment, grinding and burning tools, air and water hoses?				
7. If work platforms are required, are they erected properly and are they adequate to perform the work?				
8. Are classified materials properly safeguarded?				
9. Are waste containers properly closed or sealed?				
10. Are chemical/reagent containers closed or sealed when not in use?				
11. Is the area free of oil spills, steam leaks, and leaks?				
12. Are required warning signs, operators aids, and posted material in place and readable?				

APPENDIX 10

Page 1 of 1

GENERIC CALIBRATION CHECKLIST

Attribute	Yes	No	N/A	Comments
1. Is the instrument/gauge secured appropriately to prevent excessive vibration?				
2. Does the instrument/gauge have a unique identification number or designation?				
3. Is the instrument/gauge within its calibration due date?				
4. Is the indicator reading/needle stable?				
5. Is the reading on scale?				
6. Does the instrument/gauge have a calibration sticker?				
7. Does the calibration sticker indicate when the next calibration is due?				
8. Does the calibration sticker indicate who (initials/name) performed the last calibration?				

Rocky Flats Plant

1-31000-COOP-003

REVISION 0

CONTROL OF ON-SHIFT TRAINING

APPROVED BY:

J. E. Zane 10/9/92
 General Manager,
 Rocky Flats Plant
 Date

Responsible Organization: Plutonium ProductionEffective Date: October 27, 1992

CONCURRENCE:

/s/ B. J. Hanni for G. E. Marx 9/15/92
 Associate General Manager,
 Administration and Planning
 Date

/s/ H. S. Berman 9/17/92
 Associate General Manager,
 Engineering
 Date

/s/ J. M. Kersh 9/14/92
 Associate General Manager,
 Environmental Restoration Management
 Date

/s/ J. M. Kersh 9/14/92
 Associate General Manager,
 Environmental and Waste Management
 Date

/s/ E. H. Ideker 9/11/92
 Associate General Manager,
 Facility Management and Operations
 Date

/s/ D. W. Ferrera 9/10/92
 Associate General Manager,
 Maintenance and Plant Support
 Date

/s/ L. C. Smith for J. G. Davis 9/18/92
 Associate General Manager,
 Performance and Quality Assurance
 Date

/s/ J. H. Riley 9/23/92
 Associate General Manager,
 Plant Safety and Security
 Date

Spencer Williams Jr 10/06/92
 Site Operations Review Committee Chairman
 Date

[Signature]
 Subject Matter Expert
 Date

AFFECTS PLANT SAFETY
PROCEDURE USE CATEGORY 3

CONTROLLED COPY

The following PRRs have been incorporated in this revision:
 92-PRR-000586

This procedure supersedes procedure COOP-003, Revision 1.

PADC-92-00444

Reviewed for Classification

By *Am Butler - unu -*

Date 10-6-92

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
TITLE	1
TABLE OF CONTENTS	2
1. PURPOSE	3
2. SCOPE	3
3. DEFINITIONS	3
4. RESPONSIBILITIES	6
4.1 Operations Manager (OM)	6
4.2 Building Qualification Program Manager	6
4.3 Building Training Manager	7
4.4 Shift Manager (SM)	7
4.5 On-Shift Training Instructors	7
4.6 Qualification Examiners	7
4.7 Performance-Based Training	8
4.8 Operations and Support Personnel	8
5. INSTRUCTIONS	9
5.1 On-Shift Training Instructor Qualification and Evaluation	9
5.2 Operations and Support Personnel Qualification Requirements	9
5.3 Content of On-Shift Training Programs	10
5.4 Conduct of On-Shift Training	11
5.5 Abnormal and Emergency Conditions	13
5.6 Documentation of On-Shift Training	13
6. RECORDS	14
7. REFERENCES	14
<u>Appendices</u>	
Appendix 1, On-Shift Training Flow Chart	16
Appendix 2, Job Classifications Requiring Qualification Packages	17

1. PURPOSE

- 1.1 This procedure establishes the necessary on-shift evaluation and qualification training requirements for all on-shift instructors and operations and support personnel.
- 1.2 This procedure also establishes the minimum requirements for the conduct of on-shift training of operations and support personnel in conjunction with established on-shift qualification programs.
- 1.3 The on-shift training qualification program(s) is implemented to ensure that operations and support personnel are qualified to properly and safely perform assigned tasks. On-shift training is conducted so operations and support personnel receive training within the job environment and with as much equipment operating experience as possible.

2. SCOPE

- 2.1 This procedure addresses the requirements for developing, enhancing, and verifying the skills and knowledge of shift operations and support personnel. This procedure is to be used in conjunction with 1-10000-TUM, Training User's Manual.

3. DEFINITIONS

- 3.1 **Instructor.** An individual who meets Rocky Flats Plant (RFP) qualification standards to deliver training, on either a full-time or occasional basis and who presents classroom, laboratory, workshop, or walkthrough instruction, and/or evaluates trainees.

Instructor Guide. An instructor's document that outlines instructor and trainee activities, lesson objectives, lesson content, and resources necessary for the conduct of training.

- 3.3 **Job.** The duties, activities, and responsibilities that constitute the entire scope of a person's assigned activities or office held.
- 3.4 **Lesson.** A stand-alone unit of instruction covering a single topic.
- 3.5 **On-Shift Training.** On-the-job training for shift personnel and building support personnel.
- 3.6 **On-the-Job Training (OJT).** A systematic method of providing and ensuring that employees possess the required job-related knowledge and skills by conducting and evaluating training in the actual work environment.
- 3.7 **Oral Examination.** Evaluation of a student's level of knowledge in which a student answers questions related to a knowledge requirement in the applicable Qualification Standard.
- 3.8 **Performance-Based Training (PBT).** A formal, systematic approach to training which is based on tasks and related knowledge and skills required for competent job performance.
- 3.9 **Performance Evaluation.** Practical examination (by demonstration) of an area of skill and appropriate knowledge of a learner by a Qualification Examiner.
- 3.10 **Qualification.** Formal verification and documentation that an individual is properly and sufficiently trained to perform an assigned job.
- 3.11 **Qualification Card.** A document in the Qualification Standards Package (QSP) listing specific knowledge and skill requirements followed by a space where a designated individual is to sign and date after a satisfactory level of knowledge or skill has been demonstrated by the student in either classroom training, walkthrough training, oral examination, or performance evaluation.

- 3.12 **Qualification Examiner.** An individual qualified through training and technical competence to evaluate a student's mastery of knowledge and skills covered in OJT or walkthrough.
- 3.13 **Qualification Standard Package.** A document that defines the required knowledge and/or skills (above entry level) regarding a specific learning objective, procedure, task, system, component, or theory. The standard also specifies prerequisite knowledge, performance requirements, examination requirements, and level of accomplishment for practical requirements. The qualification card is part of the QSP.
- 3.14 **Task.** A unit of work, having an identifiable beginning and end, and resulting in an observable outcome.
- 3.15 **Training.** Instruction designed to develop or improve job performance.
- 3.16 **Training Program.** A planned, organized sequence of activities designed to prepare individuals to perform their jobs, meet a specific position or classification need, and to maintain or improve their job performance.
- 3.17 **Walkthrough Training.** A step-by-step simulation of performance of the procedure performed in the plant at the actual location where the procedure would be performed.

4. RESPONSIBILITIES

4.1 Operations Manager (OM)

- 4.1.1 Defines on-shift qualification and training needs and approves on-shift training material.
- 4.1.2 Approves the qualification program for on-shift training of operations and support personnel.
- 4.1.3 Ensures facility personnel are trained and/or qualified to properly and safely perform their assigned tasks.
- 4.1.4 Designates a Building Qualification Program Manager (BQPM) and/or a Building Training Manager (BTM).
 - 4.1.4.1 If the OM designates only a BQPM or BTM, but not both, that individual is responsible for both BQPM and BTM responsibilities and actions.
- 4.1.5 Designates on-shift training instructors and qualification examiners.

4.2 Building Qualification Program Manager

- 4.2.1 Provides the necessary oversight for on-shift training program quality and ensures proper conduct of on-shift training.
- 4.2.2 Ensures all OJT, oral examinations, and performance evaluations are completed prior to the individual's scheduled qualification date.
- 4.2.3 Ensures all training documentation is maintained in accordance with 1-10000-TUM 02.13, Training Records.

4.3 Building Training Manager

- 4.3.1 Reviews tasks selected for training, completed qualification cards, and completed QSPs.
- 4.3.2 Maintains responsibility for implementation of the on-shift training program.

4.4 Shift Manager (SM)

- 4.4.1 Ensures on-shift training activities do not interfere with normal operating activities.
- 4.4.2 Ensures established limits for the number of trainees involved in a given evolution are observed.
- 4.4.3 Ensures personnel attend training when scheduled or has arranged cancellations or rescheduling of training in advance.

4.5 On-Shift Training Instructors

- 4.5.1 Prepare and obtain approval of instructor guides, student guides, and presentations for on-shift training.
- 4.5.2 Conduct on-shift training sessions.

4.6 Qualification Examiners

- 4.6.1 Prepare and administer oral and performance examinations.

4.7 Performance-Based Training

- 4.7.1 Provides training support as necessary when requested by the BTM and Maintenance Training & Qualification (MT&Q).

4.8 Operations and Support Personnel

- 4.8.1 Prepare for on-shift training, oral examinations, and performance evaluations using appropriate student guides and reference material.
- 4.8.2 Attend training when scheduled or notifies SM in advance of the need for cancellation or rescheduling of training.
- 4.8.3 Participate in on-shift training sessions.

5. INSTRUCTIONS

NOTE

An overview of the process for on-shift training is shown in Appendix 1, On-Shift Training Flow Chart.

5.1 On-Shift Training Instructor Qualification and Evaluation

5.1.1 The OM designates on-shift qualification examiners, not involved in instructor duties, and on-shift training instructors.

5.1.1.1 Qualified Operators from the training department may be used in place of on-shift personnel to fill these positions.

5.1.2 Before being designated as qualification examiners, on-shift training instructors have:

- (1) Demonstrated knowledge and skills at or above the level to be achieved by trainees, as evidenced by previously documented training, education, and experience.
- (2) Satisfactorily demonstrated knowledge and skills necessary to prevent improper operation or damage of equipment in cases where trainees will actually operate equipment.
- (3) Satisfactorily completed the RFP instructor training course.

5.1.3 The OM evaluates on-shift training instructors using 1-10000-TUM 02.06, Qualification and Evaluation of Training Instructors.

5.2 Operations and Support Personnel Qualification Requirements

5.2.1 The OM ensures that facility personnel are trained and/or qualified to properly and safely perform their assigned tasks.

- 5.2.2 The responsible BQPM/BTM verifies that each trainee meets the applicable qualification requirements before the initiation of on-shift training, including completion of classroom and other training prerequisites specified in the QSP.

5.3 Content of On-Shift Training Programs

- 5.3.1 The OM defines on-shift qualification and training needs and approves on-shift training material.
- 5.3.2 PBT, in coordination with the BTM and MT&Q, develops appropriate QSPs for each shift job position listed in Appendix 2, Job Classifications Requiring Qualification Packages, in accordance with:
- (1) 1-10000-TUM 02.02, Training Material Development and Approval Process.
 - (2) 1-10000-TUM 03.02, Training Material Design Standard.
- 5.3.2.1 PBT provides training support as necessary when requested by the BTM and MT&Q.
- 5.3.2.2 The on-shift training material identifies the tasks the trainee must accomplish on shift, the knowledge requirements for each task, and what the trainee must do (such as perform, simulate, observe, or discuss).
- 5.3.2.3 The on-shift training material specifies the maximum trainee-to-instructor ratio and trainee-to-operations personnel ratio participating in a given evolution considering:
- (1) Training effectiveness.
 - (2) The potential for adverse effects on the facility.
 - (3) The potential for distractions.

5.3.2.4 The on-shift training programs address nuclear safety aspects of the items listed in procedure 1-31000-COOP-001, Conduct of Operations as appropriate to facility specific shift activities.

5.3.3 Trainees are trained on events according to event severity and/or consequences, including appropriate immediate training before assuming shift duties.

5.4 Conduct of On-Shift Training

5.4.1 On-shift training is conducted in accordance with 1-10000-TUM 02.14, Conduct of Walkthrough Training and Performance Evaluations with guidance from the BQPM. (See Appendix 1 for a flow chart of the on-shift training process.)

5.4.2 Operations and support personnel prepare for on-shift training, oral examinations, and performance evaluations using appropriate student guides and reference material.

5.4.3 The on-shift training instructor conducts training for the job classifications listed in Appendix 2 on a one-on-one basis at the assigned work station.

5.4.4 The SM ensures established limits for the number of trainees involved in a given evolution are observed.

5.4.5 Important aspects of on-shift training include the following:

5.4.5.1 Whenever trainees operate equipment, a qualified instructor observes the trainee and is in position (no farther than arm's length) to intervene or assume control, if necessary.

- 5.4.5.2 Until the trainees have demonstrated adequate understanding of an operation, trainees discuss the safety cautions and notes, and procedural steps with the instructor prior to performing the operation.
- 5.4.5.3 Trainees demonstrate actions to be performed by identifying control switches, valves, and breakers that are to be manipulated prior to performing the operation.
- 5.4.5.4 When trainees record equipment parameters on official round sheets or logs, the instructor verifies the recorded information is correct by initialing the entry.
- 5.4.5.5 The trainee and instructor discuss any out-of-specification readings and the consequences of allowing such trends to continue.
- 5.4.5.6 Trainees do not make independent decisions or take actions that could affect plant safety.
- 5.4.5.7 Qualification Examiners prepare and administer oral and performance examinations as required by 1-10000-TUM 02.14.
- 5.4.5.8 The BQPM ensures all OJT, oral examinations, and performance evaluations are completed prior to the scheduled completion date.

5.5 Abnormal and Emergency Conditions

- 5.5.1 The on-shift operations and support personnel or on-shift training instructor suspends trainee operation of equipment during unanticipated or abnormal events, accident conditions, or when they determine suspension is necessary to ensure safe and reliable facility operation.
- 5.5.2 During abnormal or accident conditions, trainees provide assistance at the discretion of the qualified operator.

5.6 Documentation of On-Shift Training

- 5.6.1 On-shift training instructors document on the trainee's qualification card when each requirement is satisfactorily completed.
- 5.6.2 Supervision, BQPM, BTM, and the OM review completed QSPs for satisfactory completion of training and qualification requirements.
- 5.6.3 When all listed training and qualification requirements are satisfactorily completed, the BTM and OM sign the qualification card, approving the individual's qualification to perform work in the specified job classification at the facility.

6. RECORDS

6.1 BQPM ensures that on-shift training instructors transmit original documentation of each trainee's on-shift training to the Plant Training Records Office of PBT for retention in accordance with 1-10000-TUM 02.13, Training Records including:

- (1) Completed QSPs.
- (2) Completed and evaluated written and oral examinations or other documentation of completed training.
- (3) Documents regarding training course equivalency determinations, training waivers, and extensions of qualifications.
- (4) Attendance records for required training courses or sessions.
- (5) Applicable certificates of training completion.
- (6) Employee work history.

6.1.1 Copies of training documentation may be retained at the facility.

7. REFERENCES

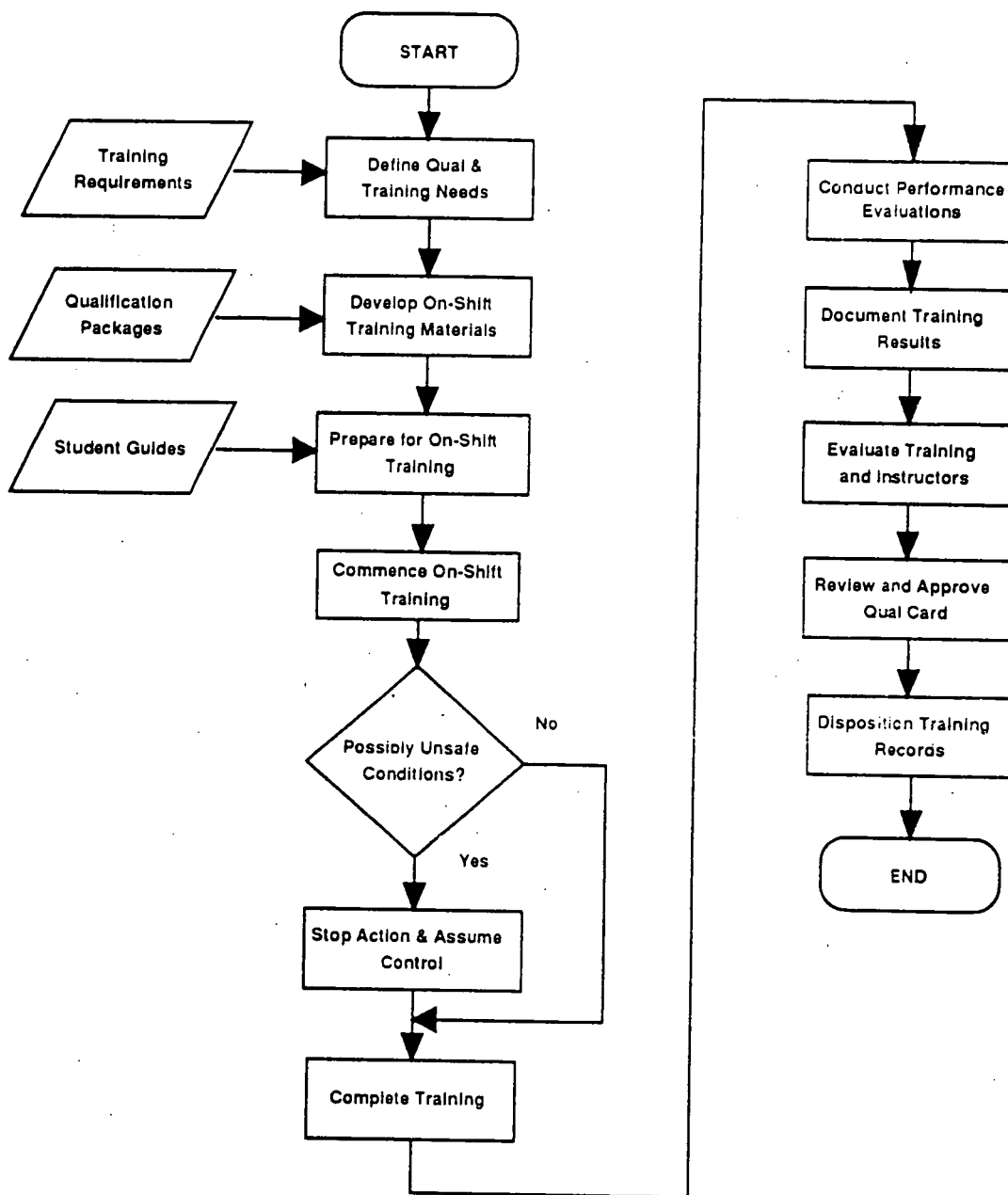
- 7.1 Department of Energy (DOE) Order 5480.18, Accreditation of Performance-Based Training for Category A Reactors and Nuclear Facilities
- 7.2 DOE Order 5480.19, Conduct of Operations Requirements for DOE Facilities
- 7.3 DOE Order 5480.20, Personnel Selection, Qualification, and Training Requirements
- 7.4 1-10000-TUM 01.01, Training Program Overview
- 7.5 1-10000-TUM 02.02, Training Material Development and Approval Process

- 7.6 1-10000-TUM 02.06, Qualification and Evaluation of Training Instructors
- 7.7 1-10000-TUM 02.13, Training Records
- 7.8 1-10000-TUM 02.14, Conduct of Walkthrough Training and Performance Evaluations
- 7.9 1-10000-TUM 03.02, Training Material Design Standard
- 7.10 1-31000-COOP-001, Conduct of Operations

APPENDIX 1

Page 1 of 1

ON-SHIFT TRAINING FLOW CHART



APPENDIX 2

Page 1 of 3

**JOB CLASSIFICATIONS REQUIRING
QUALIFICATION PACKAGES**

- A. Operations Manager/Shift Superintendent/Shift Manager/Shift Supervisor/Shift Technical Advisor**
 - a. Supervisors/foremen of the job classifications in the following list
- B. Operator/Technician (Non-Reactor)**
 - a. Air Filter Technician
 - b. Assembler
 - c. Chemical Operator - Recovery
 - d. Chemical Operator - Treatment
 - e. Chemical Operator - Solid Waste
 - f. Clerk Packer
 - g. Experimental Operator
 - h. Machinist (Production)
 - i. Metallurgical Operator
 - j. Material Analyst
 - k. Stationary Operating Engineer
 - l. Waste Technician
 - m. Welding Specialist

APPENDIX 2

Page 2 of 3

C. Instrument and Control Technician

- a. Alarm Technician
- b. Telecommunications Technician
- c. Electronics Technician (Radiation Instrumentation)
- d. Metrology Technician
- e. Nondestructive Testing (NDT) Technician

D. Radiological Protection Technician: Radiation Protection Technologist

E. Chemistry Technician: Analytical Laboratory Technician

F. Electrical Maintenance Technician

- a. Electrician
- b. Electrician Technician
- c. Lineman - Electrician

G. Mechanical Maintenance Technician

- a. Maintenance Machinist
- b. Pipefitter
- c. Sheetmetal Worker

APPENDIX 2

Page 3 of 3

H. Technical Support Staff

- a. Development Chemists
- b. Development Analysis Chemists
- c. Development Analysts
- d. Engineers - Chemical
- e. Engineers - Quality
- f. Engineers - Criticality Safety
- g. Engineers - Environmental
- h. Engineers - Facility
- i. Engineers - Fire Emergency Coordinator; Fire Protection Engineer
- j. Engineers - Health and Safety area Engineer
- k. Engineers - Recovery Modification
- l. Engineers - Safety and Safety Analysis
- m. Engineers - Standards
- n. Engineers - Waste
- o. Environmental Coordinator
- p. First Line Supervisors and Managers of Technical Support
- q. Health and Industrial Hygienists
- r. Health Physicists, Staff
- s. Manufacturing Planner/Analyst (Waste)
- t. Quality Analysis - Principal
- u. Technical Administration - Integration and Management; Investigation Occurrence
- v. Technical Support - Process (Waste)
- w. Technical Support - Development (Chemical)
- x. Technical Support - Quality
- y. Technical Support - Standards

Rocky Flats Plant

1-31000-COOP-004

REVISION 0

VITAL SAFETY SYSTEMS OPERATIONAL STATUS

APPROVED BY: *[Signature]*General Manager,
Rocky Flats Plant

Date

Responsible Organization: Plutonium ProductionEffective Date: October 27, 1992

CONCURRENCE:

/s/ G. E. Marx/ 9/3/92Associate General Manager,
Administration and Planning

Date

/s/ M. M. McDonald for H. Berman, 9/3/92Associate General Manager,
Engineering

Date

/s/ J. M. Kersh/ 9/7/92Associate General Manager,
Environmental Restoration Management

Date

/s/ J. M. Kersh/ 9/7/92Associate General Manager,
Environmental and Waste Management

Date

/s/ F. H. Ideker/ 9/2/92Associate General Manager,
Facility Management and Operations

Date

/s/ D. W. Ferrera/ 9/10/92Associate General Manager,
Maintenance and Plant Support

Date

/s/ L. C. Smith for J. G. Davis, 9/8/92Associate General Manager,
Performance and Quality Assurance

Date

/s/ J. H. Riley/ 9/18/92Associate General Manager,
Plant Safety and Security

Date

[Signature]
Site Operations Review Committee Chairman

Date

[Signature]
Subject Matter Expert

Date

AFFECTS PLANT SAFETY
PROCEDURE USE CATEGORY 3

CONTROLLED COPY

The following PRRs have been incorporated in this revision:
92-PRR-000587

This procedure supersedes procedure COOP-004, Revision 1.

PADC-92-00445

Reviewed for Classification

By *[Signature]* -UNU-

Date 10-5-92

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
TITLE	1
TABLE OF CONTENTS	2
1. PURPOSE	3
2. SCOPE	3
3. DEFINITIONS	3
4. RESPONSIBILITIES	4
4.1 Operations Manager (OM)	4
4.2 Shift Manager (SM)	5
4.3 Shift Technical Advisor	6
4.4 Other Organizations	6
5. INSTRUCTIONS	7
5.1 Format	7
5.2 Required Data	7
5.3 Location	8
5.4 Supporting Information	8
5.5 Optional Usage	9
6. RECORDS	9
7. REFERENCES	9
<u>Appendices</u>	
Appendix 1, Vital Safety Systems Operational Status Flow Chart	11
Appendix 2, Sample Systems Status Board	12

1. PURPOSE

- 1.1 This procedure defines the process for effectively providing an accurate visual display (status board) of building Vital Safety Systems (VSS) status. The status board is used as an aid in making operational decisions that ensure safe and efficient operation of the building.

2. SCOPE

- 2.1 This procedure applies to VSS and support systems which directly affect VSS or building operations.

3. DEFINITIONS

- 3.1 **Out-of-Commission.** The equipment or system is not required to support the current mission of a facility and is not expected to be returned to operation.
- 3.2 **Out-of-Service.** Equipment not available for operation.
- 3.3 **Out-of-Tolerance.** A condition that exists upon failure to meet a Limiting Condition for Operation (LCO), or Surveillance Requirement (SR) specification when the associated remedial action statement has been initiated.
- 3.4 **Red-Line Drawing.** Any drawing that has one or more elements updated, using for example a red pencil, to reflect actual configuration of facilities, systems, or components. These drawings are for interim use only and are submitted for formal update in accordance with Rocky Flats Plant (RFP) document/drawing control procedures and the CCCP Manual.

- 3.5 **System Status Board.** A board with a suitable marking surface used to accurately record VSS or supporting VSS system information. The updated information displayed on this board may be used as an aid in making operational decisions.
- 3.6 **Vital Safety Functions.** Those functions described within the Final Safety Analysis Report (FSAR) and supporting safety analyses that are relied on to detect or mitigate the radiological consequences of an accident, including criticality.
- 3.7 **Vital Safety Systems.** Those systems, subsystems, and component functions that are depended on for achieving Vital Safety Functions. Vital Safety Systems are Category 1 systems as defined in CCCP Manual.

4. RESPONSIBILITIES

4.1 **Operations Manager (OM)**

- 4.1.1 Implements the requirements of this procedure to provide building personnel with visual information on the current status of VSS and other systems necessary to support building operations.

NOTE

VSS and other key safety systems are listed in the Configuration Change Control Manual.

- 4.1.2 Establishes a list of systems, other than VSS and key safety systems, which support building operations and are monitored in accordance with this procedure.
- 4.1.3 Determines appropriate information for inclusion on the Systems Status Board.

4.1.4 Determines Systems Status Board location, and ensures supporting documents and red-line schematic drawings are provided near the Systems Status Board.

4.1.5 When no Shift Technical Advisor (STA) is assigned to a building, assigns STA responsibilities from this procedure to other individuals.

4.2 Shift Manager (SM)

4.2.1 Ensures the Systems Status Board information is current and accurate.

4.2.2 Designates individual(s) authorized to enter data on status board.

4.2.3 Uses the information on the Systems Status Board in connection with:

- (1) LCO Tracking (Out-of-Tolerance Conditions).
- (2) Operating Area Logs and Records.
- (3) Deficiency Control Procedure.
- (4) Lockout/Tagout Procedure.
- (5) Plan of the Day.

4.2.4 Uses the Systems Status Board when performing shift turnover briefings.

4.2.5 Uses the Systems Status Board when making decisions controlling activities performed by other organizations.

4.2.6 Uses the Systems Status Board for compiling and transmitting status information efficiently and accurately.

4.3 Shift Technical Advisor

- 4.3.1 Provides technical assistance and counsel to operations and support personnel if assigned to the building (assignment is on a case-by-case basis only).
- 4.3.2 Maintains awareness of VSS and supporting systems operational or maintenance status.
- 4.3.3 Assists in performing activities on a VSS or any supporting systems.

4.4 Other Organizations

- 4.4.1 Coordinate activities to be performed within the building with the responsible SM, including reporting the results of all such activities and other information pertaining to the status of VSS and supporting systems.

5. INSTRUCTIONS

NOTE

An overview of the process for maintaining awareness of the VSS operational status is shown in Appendix 1, Vital Safety Systems Operational Status Flow Chart.

5.1 Format

- 5.1.1 The Systems Status Board is a white board, or other suitable marking surface, which allows data to be entered and changed to accurately display the necessary information. (See Appendix 2, Sample Systems Status Board.)
- 5.1.2 The Systems Status Board is divided into sections using lines and lettering made with permanent paint or tape, or other suitable material similar to the layout shown in Appendix 2. More than one board may be necessary, depending on the area required for the display of data.
- 5.1.3 Identification of all VSS or supporting VSS systems on the Systems Status Board is made with permanent paint or tape.

5.2 Required Data

- 5.2.1 Appendix 2 gives examples of the type of items to appear on the Systems Status Board for the VSS and appropriate support systems.
 - 5.2.1.1 The responsible OM determines the items to be included and the level of detail for information provided on these items.
- 5.2.2 Designated individual(s) record accurate, clear, and concise information on the Systems Status Board.

5.2.3 The SM maintains Systems Status Board with current data. Current means as soon as reasonably possible as dictated by facility operating conditions.

5.2.4 Boards are updated as soon as Lockouts/Tagouts and work packages are approved, as applicable.

5.3 Location

5.3.1 The OM designates the location of the Systems Status Board in an area near the SM's work station and where accessible to building personnel.

5.4 Supporting Information

5.4.1 The SM maintains Systems Status Board supporting documents such as Plan of the Day, Out-of-Service list, Out-of-Commission list, and special or unusual radiological conditions near the Systems Status Board for reference purposes.

5.4.2 Red-line schematic drawings for VSS and support systems designated by Facilities Engineering and the SM are readily available for assessing system conditions and evaluating system status changes.

5.4.3 Procedures that control building VSS operations, as designated by the SM, are readily available for operations use.

APPENDIX 2
Page 2 of 2

1. Summarize Building Operational Status.
2. List Name/Number of Vital Safety Systems and appropriate support systems, as compiled by Facilities Engineering, which affect Vital Safety Systems or building operations.
3. List Out-of-Tolerance Condition - list remedial action and responsible manager in Comments Section 12.
4. List Time and Date the Out-of-Tolerance Condition was entered.
5. List Time and Date, obtained from the LCO Tracking Form or from the Ops/Shift Manager, required to resolve the Out-of-Tolerance Condition.
6. List the identification (Name/Number) of abnormal alarms, such as uncleared alarms or disabled alarms; provide explanation in Comments Section 12.
7. List YES/NO. If NO, provide explanation of off normal alignment in the Comments Section 12.
8. List the identification (Name/Number) of Out-of-Service equipment; provide explanation in Comments Section 12.
9. Immediately list the Lockout/Tagout number(s) of equipment that may impact plant operations, plus the identification number of the equipment tagged, such as breaker, valve, damper number.
10. List any surveillance instruction that is in progress that may impact plant operations and the title of the performing organization responsible for the surveillance.
11. Enter initials, date, and time of status update(s).
12. List specific comments as directed above.
13. Immediately list any additional comments that are necessary to clarify system status, such as abnormal operating conditions, internal/external leakage, equipment degradation or the status of work in progress including the applicable work control form numbers.

5.5 Optional Usage

5.5.1 Additional Systems Status Boards may be used, as directed by the OM, to provide status for items such as:

- (1) Radiological conditions.
- (2) Maintenance activities.
- (3) Calibrations.
- (4) Testing activities.

5.5.1.1 The OM determines useful and necessary information to be included on the additional status boards.

6. RECORDS

Section not required

7. REFERENCES

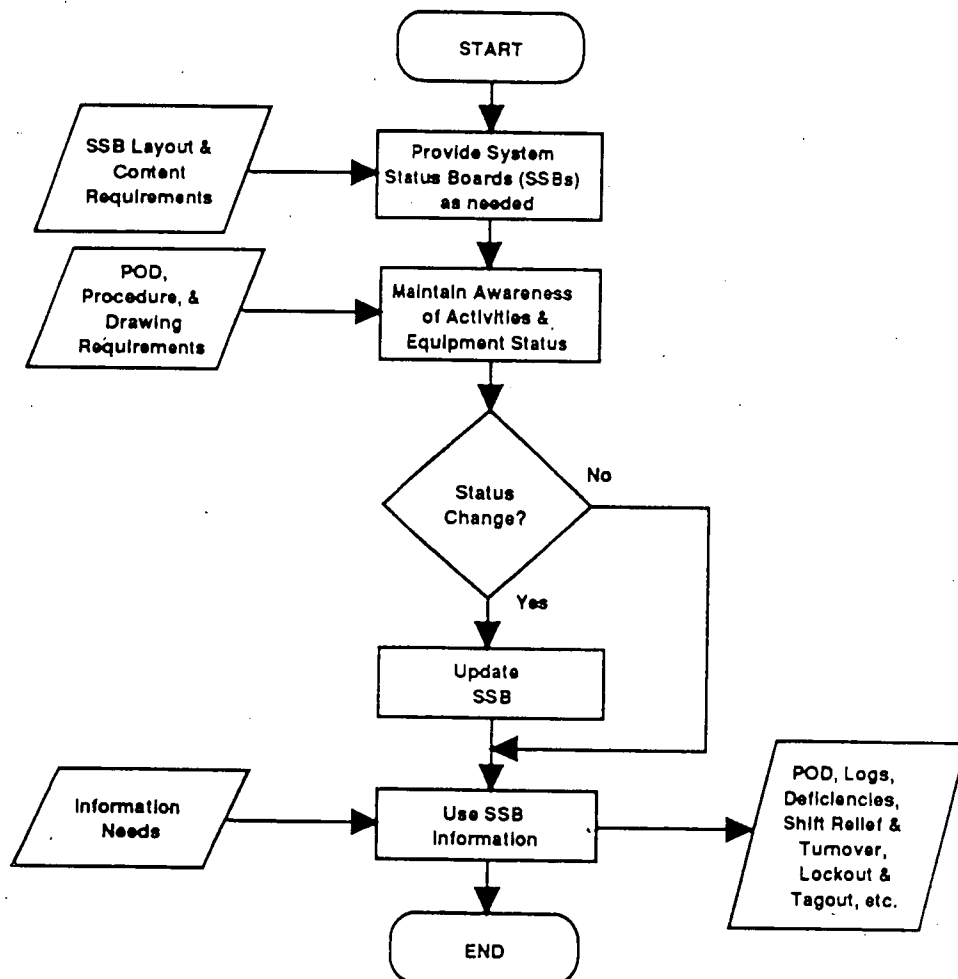
- 7.1 Configuration Change Control Manual
- 7.2 Department of Energy Order 5480.19, Conduct of Operations Requirements for DOE Facilities
- 7.3 RFP Quality Assurance Manual
- 7.4 1-15320-HSP-2.08, Lockout/Tagout
- 7.5 1-31000-COOP-006, Operating Area Logs and Records
- 7.6 1-31000-COOP-007, Shift Relief and Turnover

7.7 1-31000-COOP-016, Plan of the Day (POD)

7.8 1-74000-IWCP-1, Work Control Form Processing

APPENDIX 1
Page 1 of 1

VITAL SAFETY SYSTEMS OPERATIONAL
STATUS FLOW CHART



APPENDIX 2

Page 1 of 2

SAMPLE SYSTEMS STATUS BOARD

[illegible]

Rocky Flats
Environmental Technology Site
1-U70-COOP-005

REVISION 0

AUTHORIZATION BASIS TRACKING AND
DOCUMENTATION

APPROVED BY: mmmcDonald, mmmMcDonald, 4/25/95
Director, Print Name Date
Organizational Effectiveness

Responsible Organization: Organizational Effectiveness Effective Date: 6/1/95

CONCURRENCE BY THE FOLLOWING DISCIPLINES IS DOCUMENTED IN THE PROCEDURE HISTORY FILE:

Analytical Services
Building Deactivation
Engineering & Safety Services
Performance Assurance
SNM Management & Storage
Support Services
Waste Management
Waste Stabilization

USE CATEGORY 4

ORC review SORC-95-016 (04/11/95)

The following have been incorporated in this revision:
95-DMR-000516

Reviewed for Classification/UCNI

By A. Hagan
Date 4/24/95

This procedure supersedes procedure 1-31000-COOP-005, Revision 0.

Periodic review frequency: 3 years from the effective date

PADC-95-01419

CONTROLLED COPY

06/01/95

LIST OF EFFECTIVE PAGES

<u>Pages</u>	<u>Effective Date</u>	<u>Change Number</u>
1-14	06/01/95	

TOTAL NUMBER OF PAGES: 14

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
TITLE PAGE	1
LIST OF EFFECTIVE PAGES	2
TABLE OF CONTENTS	3
1. PURPOSE	4
2. SCOPE	4
3. OVERVIEW	5
4. DEFINITIONS	5
5. RESPONSIBILITIES	5
5.1 Compliance Tracking Coordinator (CTC)	5
5.2 Operations Manager	6
5.3 Performing Organization	6
5.4 Shift Manager	6
5.5 Shift Technical Advisor	6
6. INSTRUCTIONS	7
6.1 Compliance Tracking System	7
6.2 Scheduling of LCO Surveillances or Compensatory Measures	7
6.3 Performance of Scheduled Surveillances and Compensatory Measures	8
6.4 Compensatory Measure Actions	10
6.5 Documentation and Tracking System Update	11
6.6 Closure of EOE's, JCO's, and USQDs	11
7. RECORDS	12
8. REFERENCES	12
<u>Appendixes</u>	
Appendix 1, Surveillance Intervals	13
Appendix 2, Minimum Compliance Tracking Information	14

1. PURPOSE

This procedure describes the process for tracking and documenting Limiting Conditions for Operation (LCO) surveillances and Operational Safety Requirements (OSRs) compliance-related compensatory measures associated with Unreviewed Safety Question Determinations (USQDs), Engineering Operability Evaluations (EOEs), and Justifications for Continued Operations (JCOs).

2. SCOPE

This procedure applies to all surveillances and testing associated with authorization basis documents and to all Rocky Flats Environmental Technology Site (Rocky Flats) contractor and subcontractor employees. The surveillance and testing specifications may be in the form of LCO Surveillance Requirements (SRs) or compensatory measures as defined in applicable USQDs, EOEs, or JCOs.

This procedure addresses the following topics:

- Compliance tracking system responsibilities
- Scheduling of LCO surveillances and compensatory measures
- Performance of scheduled surveillances
- Compensatory measures actions
- Closure of EOEs, JCOs, and USQDs
- Documentation and tracking system updates

This procedure does not include planned out-of-tolerance maintenance activities.

This revision is a total rewrite and revision bars are omitted. This revision supersedes 1-31000-COOP-005, Revision 0. This revision is designated Revision 0 because the procedure number has been changed.

3. OVERVIEW

A building's authorization basis is the licensing document between the Department of Energy (DOE) and the site contractor responsible for the operation of the building. Compliance with the authorization basis requires strict adherence to provisions of the OSR or Technical Safety Requirement (TSR). If compliance cannot be maintained, remedial actions must be taken.

Often, when system deficiencies or out-of-tolerance conditions exist, engineering and nuclear safety documents are prepared to justify conditionally operable status based on compensatory measures provided by EOE/USQD, to request DOE approval for continued operations under a JCO, or to recommend limited scopes of termination of operations as specified in an EOE/USQD. The compensatory measures contained in these documents are required for maintaining authorization basis compliance. It is imperative that these compensatory measures are complied with in the same manner as LCOs and SRs.

4. DEFINITIONS

All definitions referred to are in 1-U69-COOP-GLOSSARY, Conduct of Operations Manual Glossary.

5. RESPONSIBILITIES

5.1 Compliance Tracking Coordinator (CTC)

Maintains the Compliance Tracking System.

Tracks the status of LCO surveillances and compensatory measures.

Maintains reference copies of the Compliance Tracking Forms.

5.2 Operations Manager

Ensures that the Compliance Tracking System is controlled and maintained.

Ensures that LCO surveillances and compensatory measures are implemented and performed as required.

Makes operability determinations.

5.3 Performing Organization

Initiates and completes Compliance Tracking Forms.

Performs LCO surveillances and compensatory measures.

5.4 Shift Manager

Makes operability determinations in the absence of the Operations Manager.

Notifies the Operations Manager and the CTC of changes to LCO surveillances and compensatory measures.

Reviews the Compliance Tracking Forms.

5.5 Shift Technical Advisor

Supports the Operations Manager and Shift Manager in the control of LCO surveillances and compensatory measures.

6. INSTRUCTIONS

6.1 Compliance Tracking System

Operations Manager

- [1] Designate a Compliance Tracking Coordinator (CTC) in writing.
- [2] Assign the responsibility for control and maintenance of the Compliance Tracking System to the CTC.

CTC

- [3] Maintain the Compliance Tracking System in an accurate and up-to-date condition that can be used by the Operations Manager or Shift Manager to maintain operational awareness and control of authorization basis issues.
- [4] IF changes are made to LCO surveillance requirements or compensatory measures as defined by an EOE, JCO, or USQD,
OR a Compliance Tracking Form is returned by the performing organization following completion of a surveillance,
THEN update the Compliance Tracking System.

6.2 Scheduling of LCO Surveillances or Compensatory Measures

CTC

- [1] Track the status of LCO surveillances and compensatory measures using the Compliance Tracking System.
- [2] Use Appendix 1, Surveillance Intervals, to determine the due dates of LCO surveillances and compensatory measures, unless otherwise specified in an approved OSR.

The due date of a surveillance is based on past performance dates.

- [3] Enter performance intervals for compensatory measures and LCO surveillances into the Compliance Tracking System.
- [4] Schedule performance of the surveillances accordingly.

6.2 Scheduling of LCO Surveillances or Compensatory Measures (continued)

- [5] IF an upcoming surveillance is NOT performed on a regular (once per shift, day, or week) basis,
THEN notify the performing organizations with sufficient lead time to prepare for the surveillance.
- [6] Immediately notify the Operations Manager or Shift Manager of an overdue surveillance or compensatory measure in writing.

Performing Organization

- [7] Determine the lead time, depending on the work load and allowing for surveillance performance, before an out-of-tolerance condition is entered.
- [8] Submit all upcoming LCO surveillances or compensatory measures for entry on the Plan of the Day (POD).

Operations Manager

- [9] IF a surveillance or compensatory measure is to be directed by an Integrated Work Control Program (IWCP) package,
THEN initiate an IWCP package in accordance with 1-E32-IWCP-1, Work Control Form Processing.

6.3 Performance of Scheduled Surveillances and Compensatory Measure

Performing Organization

- [1] Perform LCO surveillances and compensatory measures as scheduled on the POD in accordance with current revisions of approved work instructions.

NOTE *Failure to initiate remedial actions within the required time constitutes an OSR violation.*

- [2] Initiate a Compliance Tracking Form, using Appendix 2, Minimum Compliance Tracking Information, as a guide to document the performance of an LCO surveillance or compensatory measures.

6.3 Performance of Scheduled Surveillances and Compensatory Measure (continued)

- [3] IF LCO surveillances or compensatory measures are NOT completed within the required time interval,
OR the acceptance criteria is NOT met,
THEN immediately notify the Operations Manager or Shift Manager.

Operations Manager or Shift Manager

- [4] IF notified that an LCO surveillance or compensatory measure is NOT performed within the required time interval,
OR that acceptance criteria is NOT met,
THEN:

[A] Declare the system, component, or equipment as Not Operable.

[B] Immediately initiate remedial actions.

[C] Update the System Status Board.

Operations Manager, Shift Manager, and/or Shift Technical Advisor

- [5] Review the event to determine the cause of the out-of-tolerance condition or violation.
- [6] Report the event in accordance with 1-D97-ADM-16.01, Occurrence Reporting Process.

Shift Technical Advisor

- [7] Review for adequacy of performance of LCO surveillances monthly.
- [8] Report the results of the review to the Operations Manager, in writing, listing any findings and actions taken.

6.4 Compensatory Measure Actions

Operations Manager

- [1] WHEN an approved document (EOE, JCO, or USQD) with required compensatory measures is received,
THEN implement the compensatory measures using an appropriate, approved method of implementation such as the following:
- Technical Operations Orders
 - Temporary Modifications
 - Technical Procedures

Operations Manager or Shift Manager

- [2] Notify the CTC of the following:
- Originating document (EOE, JCO, or USQD)
 - Associated compensatory measures
 - Implementing documents

CTC

- [3] Update the Compliance Tracking System by entering the following:
- The source document (EOE, JCO, or USQD)
 - The source document reference number
 - The applicable work instruction(s)
 - The performing organization
 - The frequency of performance
 - The date compensatory measures were initiated
 - The next due date
 - The expiration date for safety basis documents (EOE, JCO, or USQD)
 - The expiration date of implementing documents

Shift Technical Advisor

- [4] Review the performance of compensatory measures monthly for adequacy.
- [5] Report the results of the review to the Operations Manager, in writing, listing any findings and actions taken.

6.5 Documentation and Tracking System Update

Performing Organization

- [1] **WHEN** LCO surveillance testing or compensatory measure testing has been completed,
 THEN complete the Compliance Tracking Form.

- [2] Return the original Compliance Tracking Form and originals of any data sheets generated during the surveillance to the Operations Manager or Shift Manager.

Operations Manager or Shift Manager

- [3] Review the Compliance Tracking Form and attached data sheets for completeness, and to determine if deficiencies were identified and documented appropriately.

- [4] **WHEN** the review of the Compliance Tracking Form is completed,
 THEN sign and return the forms to the CTC.

CTC

- [5] Review and sign the Compliance Tracking Form.

- [6] Update the Compliance Tracking System to reflect the surveillance performance.

6.6 Closure of EOE, JCO, and USQDs

Operations Manager

- [1] Determine that a system, component, or equipment is operable in accordance with 1-C16-COOP-021, Operability Determination Process, or that the conditions which initiated the EOE, JCO, or USQD no longer exist.

- [2] Notify Engineering, Nuclear Safety, and the CTC in writing that applicable EOE, JCO, or USQDs are no longer required.

CTC

- [3] Update the Compliance Tracking System.

7. RECORDS

Compliance Tracking Forms generated by this procedure are Quality Assurance Records.

CTC

- [1] Maintain the original Compliance Tracking Form and attached data sheets for 12 months.
- [2] Forward the original Compliance Tracking Form and data sheets, after the 12-mo retention period, to Records Management for disposition in accordance with 1-77000-RM-001, Records Management Guidance for Records Sources.

8. REFERENCES

1-C16-COOP-021, Operability Determination Process

1-D97-ADM-16.01, Occurrence Reporting Process

1-E32-IWCP-1, Work Control Form Processing

1-U69-COOP-GLOSSARY, Conduct of Operations Manual Glossary

1-77000-RM-001, Records Management Guidance for Records Sources

APPENDIX 1

Page 1 of 1

SURVEILLANCE INTERVALS

<u>Narrative Descriptor</u>	Interval Between 2 Consecutive Surveillances	Interval Between 4 Consecutive Surveillances
	<u>Not to Exceed:</u>	<u>Not to Exceed:</u>
Shiftly (8 hours)	10 hours	26 hours
Daily (24 hours)	30 hours	78 hours
Weekly (7 days)	9 days	23 days
Monthly (30 days)	37 days	14 weeks
Bimonthly (60 days)	74 days	28 weeks
Quarterly (13 weeks)	16 weeks	42 weeks
Semiannually (6 months)	32 weeks	84 weeks
Annually (12 months)	15 months	39 months
Biennially (24 months)	30 months	78 months
Triennially (36 months)	45 months	117 months
Four years (48 months)	60 months	156 months
Five years (60 months)	75 months	195 months
Decade (120 months)	150 months	390 months
Periodically	The absolute interval given in the OSR.	

These surveillance intervals are to be used in determining an LCO surveillance or applicable compensatory measure due dates, unless otherwise specified in the approved OSR.

APPENDIX 2

Page 1 of 1

MINIMUM COMPLIANCE TRACKING INFORMATION

Compliance Tracking Forms contain the following information, at a minimum.

1. Surveillance title and description as stated in the OSR
2. Related USQD, EOE, or JCO which requires the compensatory measures
3. Building number
4. Equipment name and/or number
5. Procedure identification
6. Out-of-tolerance: yes/no
7. Comments
8. Integrated Work Control form submitted: yes/no
9. Military time surveillance was performed
10. Surveillance frequency
11. Performing group
12. Performed by
13. Date of surveillance
14. OSR date and article number
15. Compliance Tracking Coordinator signature
16. Operations Manager signature

ORIGINAL

RTPF-1000.01 (5/95)

Formerly RF-47940

Page 1 of

Document Modification Request

Printer Type all information (except signatures). Process procedures in accordance with 1-A01-PROC DEV-400, Procedure Process.

DMR No.

95-DMR-000997

Originator's Supervisor

1. Name/Phone/Page/Location

JOHN SERDINSKY JR. 6606/5693/75D

2. Date

JULY 21, 1995

3. Existing Document Number and Revision

1-31000-COOP-006

4. Document Type: ☒ Procedure ☐ Plan☐ Other

5. Document Title

OPERATING AREA LOSS AND RECORDS

6. Item

7. Page

8. Step

9. Proposed Modification

1

3

22

ADD NEW SECTION. SEE ATTACHED PAGE

2

16

7.9

ADD REFERENCE LITER IN NEW SECTION

3

3

2

ADD "2.1 APPLICATION" after step 2

10. Item

10a. Justification (reason for modification, CJC & TP & etc.)

11.

1-31000-COOP-3.01.1, TEMPORARY MODIFICATION CONTROL, WAS CANCELLED/DELETED FROM THE SYSTEM AND THE CONTENT INCORPORATED INTO COEM-DES-207 AND COOP-006. THE EXCLUSION SECTION (2.2) OF COOP-3.01.1 WAS INADVERTENTLY OMITTED. THIS SECTION ALLOWS TEMPORARY MODIFICATIONS THAT ARE POSITIVELY IDENTIFIED, REVIEWED, AND CONTROLLED IN PROCEDURES DEVELOPED IN ACCORDANCE WITH IWCP AND PLANT PROCEDURES & PROGRAMS TO BE EXCLUDED FROM PROCEDURE REQUIREMENTS. THE INCLUSION OF THIS SECTION BACK INTO THE TEMPORARY MODIFICATION PROGRAM WILL RESULT IN SIGNIFICANT COST SAVINGS. TEMPORARY MODIFICATIONS ARE ROUTINELY PERFORMED WITHIN SURVEILLANCES. THE INADVERTENT DELETION OF THIS SECTION WILL REQUIRE ENGINEERING DESIGN MODIFICATION EDS (QUALIFIED AS TEMPORARY MODS) TO PERFORM EVEN ROUTINE LCO SURVEILLANCE ACTIVITIES NOT TO MENTION THE REQUIRED PROCEDURE REVISIONS (LCO SURVEILLANCES) TO BRING SURVEILLANCE DOCUMENTS INTO COMPLIANCE WITH THIS INADVERTENT OMISSION.

Originator's Supervisor

11. ☒ Process☐ Do not Process (state reason in Block 10a)

(print/signature)

KEITH MARTIN KESSELMAN 8-4-95

12.

☒ Process (Complete Blocks 13-22)☐ Do not Process (state reason in Block 10a)

(print/signature)

J.A. GEIS.

G.A. / 5/4/95

13. New Document No. (if new or changed)

Complete either Section 14a or 14b, as applicable. For procedures, attach completed Procedure Modification Worksheet from 1-A01-PROC DEV-400.

14a. Type of Complete Modification

☐ New☒ Revision☐ One-Time-Use☐ Cancellation

14b. Changes: (check all that apply)

☒ Intent Change☐ Editorial Correction☐ Nonurgent Change☐ Regular☐ Interim Approval Requested - Needed for immediate use

(14-day limit for obtaining final approval)

Additional Attributes:

☐ Temporary☐ One-Time-Use☐ Limited Distribution15. ERM Change Control Board Required: ☐ Yes ☐ No (Applicable only to new procedures, revisions, and intent changes.)

List the reviewing disciplines in Block 16. After concurrence has been obtained (in accordance with 1-A01-PROC DEV-400), enter the name of the reviewer followed by /s/ in block 17. If the reviewer indicates no comments, the review signature constitutes concurrence. Enter the date concurrence is obtained in Block 18.

16. Organization

17a. Reviewer/Concurrence

18. Date

16a. Organization

17b. Reviewer/Concurrence

18a. Date

16b. Organization

17c. Reviewer/Concurrence

18b. Date

16c. Organization

17d. Reviewer/Concurrence

18c. Date

16d. Organization

17e. Reviewer/Concurrence

18d. Date

16e. Organization

17f. Reviewer/Concurrence

18e. Date

16f. Organization

17g. Reviewer/Concurrence

18f. Date

16g. Organization

17h. Reviewer/Concurrence

18g. Date

16h. Organization

17i. Reviewer/Concurrence

18h. Date

16i. Organization

17j. Reviewer/Concurrence

18i. Date

19. Assigned SMC/Phone/Page/Location

D.B. BRANCH X5411

B-771 8-3110

20. Cost Center

10-26

21. Charge Number

67255-70084226

22. Requested Completion Date

8/25/95

23. Procedure/Revision/USOU Number

SES-RAP-95.1079-SUK

24. Independent Safety Review Meeting and Date

N/A

25. After obtaining ALL required signatures: Responsible Manager's Approval

(print/signature)

(initial required for new procedures or revisions)

D.B. BRANCH

DBB

10/9/95

27. Effective Date

10/26/95

28. Expiration Date (if applicable)



Printed with soy ink on recycled paper

PADG-92-00446

CONTROLLED COPY

REVIEWED FOR CLASSIFICATION/CONTROL

G. SPRENGER

8-8-95

DOCUMENT MODIFICATION REQUEST (DMR)

PAGE 1 of 2

Refer to 1-A01-PPG-001 for Processing Instructions.
Print or Type All Information (Except Signatures).

1. Date 5/25/94		25. ^{9/16/94} DMR No. 94-DMR-000-1161	
2. Existing Document Number/Revision 1-31000-COOP-006 Rev. 0		3. New Document Number or Document Number if it is to be changed with this Revision	
4. Originator's Name/Phone/Pager/Location S.M. Spitzer 7987/7330/130		5. Document Title Operating Area Logs and Records	
6. Document Type <input checked="" type="checkbox"/> Procedure <input type="checkbox"/> Other		7. Document Modification Type (Check only one) Process as an Intent Change. <input type="checkbox"/> New <input type="checkbox"/> Revision <input type="checkbox"/> Intent Change <input checked="" type="checkbox"/> Nonintent Change <input type="checkbox"/> Editorial Correction <input type="checkbox"/> Cancellation	
8. Item	9. Page	10. Step	11. Proposed Modifications
1	1A	LOEP	Add list of effective pages.
2	2A	Appdx	Add: Appendix 2, Temporary Modification Log Appendix 3, Temporary Modification Request Form Appendix 4, Temporary Modification Tag Sheet Appendix 5, Temporary Modification Extension Request Appendix 6, Temporary Modification Tag
3	4	4.1.10	Add step to ensure that temporary modifications are checked monthly.
4	4	4.1.11	Add step to inform Design Engr and System Engr of temporary modification extension requests.
5	5, 6	4.2.5, 4.3.5, 4.4.3	Add needed extensions on temporary modifications over 3 months old to the list of notification items.
12. Justification (Reason for Modification, EJO #, TP #, etc.)			
<p>1: To comply with PPG procedures.</p> <p>2 - 9: To update COOP-006 because 1-31000-CCCP-3.01.1, Temporary Modification Control, ^{is being 2 9/16/94} has been deleted from the system. These changes incorporate required information to continue the use of the temporary modification process already prescribed in COOP-006.</p>			
If modification is for a new procedure or a revision, list concurring disciplines in Block 13, and enter N/A in Blocks 14 and 15. If modification is for any type of change or a cancellation, organizations are listed in Block 13, then Concuror prints, and signs in Block 14, and dates in Block 15.			
13. Organization	14. Print, Sign (if applicable)		15. Date (if applicable)
E&PM	[Signature]		
FM&O	[Signature]		
M&PS	[Signature]		
SA&A	[Signature]		
E+SS	[Signature] R.E. Kell		6/20/94
BLDG DEACT	[Signature] V.M. Pizzuto		9/7/94
SUPD SUCS	[Signature] D.W. Ferrera		6/24/94
PERF ASRN	[Signature] L.C. Smith for W.S. Colouer		9/16/94
16. Originator's Supervisor (print/sign/date) P.W. Soeyer ^{6/2/94}			
17. Assigned SME/Phone/Pager/Location DB BRANCH 2877 750	18. Cost Center 0488	19. Charge Number 820141	20. Requested Completion Date 11/1/94
21. Effective Date 11/1/94		22. Reviewer's Name/Phone/Pager/Location [Signature]	
23. ORC Review Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> ORC Not Required		24. Responsible Manager (print/sign/date) D.B. Branch ^{9/21/94}	

PAGE 1 of 1

1. Put

01/20/94

25

DMR No. 94-DMK-000122

12. Justification (Reason for Modification, EJO #, TP #, etc.)

If modification is for a new procedure or a revision, list concurring disciplines in Block 13, and enter N/A in Blocks 14 and 15. If modification is for any type of change or a cancellation, organizations are listed in Block 13, then Concurrency prints, and signs in Block 14, and dates in Block 15.

16. Originator's Supervisor (print/sign/date)
P. Sullivan *P. Sullivan* *1-30-44*

Accelerated Review? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	23. ORC Review NR
--	----------------------

Responsible Manager (print, sign, date) [Signature] 1-28-94

REVIEWED FOR CLASSIFICATION/UCN

BY A. K. Davis JND

DATE 1.24.94

CONFIDENTIAL

DMR (continuation sheet)

Page 2 of 2

Refer to 1-A01-PPG-001 for Processing Instructions.
Print or Type All Information (Except Signatures).

25. DMR No. 94-DMR-008 1161

2. or 3. Document Number/Revision 1-31000-COOP-006, Rev. 0			5. Document Title Operating Area Logs and Records
6. Item	9. Page	10. Step	11. Proposed Modifications
6	5	4.2.6	Add step to provide temporary modification tags when needed.
7	11	5.4.2	Total rewrite of Section 5.4.2, Temporary Modification Log, to delete reference to the CCCP and expand the instructions to incorporate the use of the Temporary Modification Log and supporting documentation.
8	15	7.5	Delete reference to 1-31000-CCCP-3.01.1 and renumber the following steps.
9	17A-F	Appdx	Add Appendices 2 through 6.
12. Justification (Reason for Modification)			

Rocky Flats Plant

1-31000-COOP-006

REVISION 0

OPERATING AREA LOGS AND RECORDS

APPROVED BY:

J. E. Zane
General Manager,
Rocky Flats Plant

11/09/92
Date

Responsible Organization: Plutonium ProductionEffective Date: October 27, 1992

CONCURRENCE:

/s/ G. E. Marx , 9/3/92
Associate General Manager, Date
Administration and Planning

/s/ H. S. Berman , 9/17/92
Associate General Manager, Date
Engineering

/s/ J. M. Kersh , 9/7/92
Associate General Manager, Date
Environmental Restoration Management

/s/ J. M. Kersh , 9/7/92
Associate General Manager, Date
Environmental and Waste Management

/s/ E. H. Ideker , 9/2/92
Associate General Manager, Date
Facility Management and Operations

/s/ D. W. Ferrera , 9/10/92
Associate General Manager, Date
Maintenance and Plant Support

/s/ L. C. Smith for J. G. Davis , 9/8/92
Associate General Manager, Date
Performance and Quality Assurance

/s/ J. H. Riley , 9/18/92
Associate General Manager, Date
Plant Safety and Security

10/06/92
Spencer Williams Jr.
Site Operations Review Committee Chairman Date

[Signature]
Subject Matter Expert Date

AFFECTS PLANT SAFETY
PROCEDURE USE CATEGORY 3

CONTROLLED COPY

following PRRs have been incorporated in this revision:
92-PRR-000588

This procedure supersedes procedure COOP-006, Revision 1.

PADC-92-00446

Reviewed for Classification

By *Smith-UNU*Date 10-6-92

LIST OF EFFECTIVE PAGES

<u>Pages</u>	<u>Effective Pages</u>	<u>Pages</u>	<u>Effective Pages</u>
1	10/27/92		
1A	10/26/95		
2	10/26/95		
3	10/26/95		
3A	10/26/95		
4-6	11/01/94		
7-10	10/27/92		
11-11B, 12	11/01/94		
13-14	10/27/92		
15	11/01/94		
16	10/26/95		
17	10/27/92		
17A-F	11/01/94		

The following DMRs are active for this procedure:

95-DMR-000997

94-DMR-001161

94-DMR-000122

TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
	TITLE	1
	TABLE OF CONTENTS	2
1.	PURPOSE	3
2.	SCOPE	3
2.1	Application	3
2.2	Exclusions	3
3.	DEFINITIONS	3A
4.	RESPONSIBILITIES	3A
4.1	Operations Manager (OM)	3A
4.2	Shift Manager (SM)	4
4.3	Foreman/Supervisor	5
4.4	Operations and Support Personnel	5
4.5	Shift Technical Advisor	6
5.	INSTRUCTIONS	7
5.1	General Requirements	7
5.2	Log Content Requirements	7
5.3	Log Entry Requirements	9
5.4	Required Logs and Records	10
	5.4.1 Chronological Log	10
	5.4.2 Temporary Modification Log	11
	5.4.3 Lockout/Tagout Permit Log	12
	5.4.4 Deficiency/Work Control Log	12
	5.4.5 Alarm Deactivation Log	13
	5.4.6 Operator Aids Posting Logs	14
5.5	Reviews	14
6.	RECORDS	15

TABLE OF CONTENTS (continued)

<u>Section</u>	<u>Page</u>
7. REFERENCES	15
<u>Appendices</u>	
Appendix 1, Operating Area Logs and Records Flow Chart	17
Appendix 2, Temporary Modification Log	17A
Appendix 3, Temporary Modification Request Form	17B
Appendix 4, Temporary Modification Tag Sheet	17C
Appendix 5, Temporary Modification Extension Request	17E
Appendix 6, Temporary Modification Tag	17F

94-DMR-001161

1. **PURPOSE**

- 1.1 This procedure defines the process for identifying and controlling operating logs and other records to ensure maintenance of complete and accurate operational histories of Rocky Flats Plant (RFP) facilities.

2. **SCOPE**

2.1 **Application**

This procedure applies to operations and support personnel identifying, using, tracking, and maintaining logs and records.

2.2 **Exclusions**

Typical exclusions are periodic maintenance procedures or surveillance tests with step-by-step signoffs that control installation and removal of the Temporary Modification (TM), and TMs controlled by an Operations Review Committee (ORC) approved procedure. To qualify for an exclusion, the following items shall be addressed within the procedure:

- Shift manager notifications and sign-off when TMs are installed or removed. When TMs are expected to last one shift or less, notification may occur prior to and upon completion of the procedure.
- Documentation of the placement and removal of TMs.
- Independent verifications of functional testing when TMs are installed or removed.
- Time frame during which the TM may remain installed under the authority of the procedure is limited to the duration of the procedure.
- Review and approval of the procedure by the ORC if required by 1-52000-ADM-02.01, Operations Review Committee Requirements.

General support and administration facilities (such as office buildings) that do not have configuration control programs, and Environmental Restoration Management (ERM) systems which do not affect, connect to, or interface with plant systems or utilities and which are owned and being operated by subcontractors, are exempt from this procedure.

95-DMR-000997

95-DMR-000997

95-DMR - 000997

3. DEFINITIONS

- 3.1 **Completed Log.** A log containing entries that is no longer used or active.
- 3.2 **Log.** A narrative record of activities, functions, or sequence of events at a specific shift position.

4. RESPONSIBILITIES

- 4.1 **Operations Manager (OM)**
 - 4.1.1 Determines, based on input from foremen, supervisors, functional managers, and appropriate disciplines, logs required for key shift positions, systems, processes, and equipment.
 - 4.1.2 Approves logs to be used at the assigned facility.
 - 4.1.3 Maintains a list of approved logs for assigned facility.
 - 4.1.4 Ensures required reviews of logs are performed.

- 4.1.5 Designates the job position responsible for maintaining each log.
- 4.1.6 Designates the storage location for each log (normally the responsible position's work station).
- 4.1.7 Ensures the parameters to be monitored and recorded in logs are approved by the appropriate disciplines.
- 4.1.8 Ensures completed logs and records are properly dispositioned in accordance with the RFP Records Management Manual and 1-48000-QAR-001, Quality Assurance Records.
- 4.1.9 When no Shift Technical Advisor (STA) is assigned to a building, assigns STA responsibilities from this procedure to other individuals.
- 4.1.10 Ensures that a physical check of all temporary modifications is made monthly.
- 4.1.11 Informs Design Engineer or Systems Engineer if a Temporary Modification Extension Request needs to be filed, and signs the appropriate extension form.

4.2 Shift Manager (SM)

- 4.2.1 Assists in determining key shift positions, systems, processes, and equipment requiring logs.
- 4.2.2 Ensures proper maintenance of logs by operations and support personnel.
- 4.2.3 Provides appropriate guidance for correction of out-of-tolerance conditions.

94-DMR-001161

4.2.4 Ensures appropriate action is taken for Limiting Conditions for Operations (LCO) violations in accordance with the building Operational Safety Requirement (OSR).

4.2.5 Notifies the OM of LCO violations, occurrences, needed extensions on temporary modifications over 3 months old, and abnormal or out-of-tolerance readings.

4.2.6 Provides Temporary Modification Tags, Appendix 6, when they need to be obtained by the originator of the temporary modification packages.

4.3 Foreman/Supervisor

4.3.1 Assists in determining key shift positions, systems, processes, and equipment requiring logs.

4.3.2 Maintains assigned logs.

4.3.3 Ensures proper maintenance of logs completed by operations and support personnel.

4.3.4 Provides appropriate guidance for correction of out-of-tolerance conditions.

4.3.5 Notifies the OM and SM of LCO violations, occurrences, needed extensions on temporary modifications over 3 months old, and abnormal or out-of-tolerance readings.

4.4 Operations and Support Personnel

4.4.1 Complete assigned logs in a timely manner.

94-DMR-001161

94-DMR-001161

94-DMR-001161

4.4.2 Review completed logs and records for unusual, abnormal, or unexpected conditions or trends.

4.4.3 Notify the SM and foreman/supervisor of LCO violations, occurrences, needed extensions on temporary modifications over 3 months old, and abnormal or out-of-tolerance readings and immediate corrective actions taken.

4.5 Shift Technical Advisor

4.5.1 Assists in determining key shift positions, systems, processes, and equipment requiring logs.

4.5.2 Reviews logs for equipment status, condition, and performance trends.

4.5.3 Provides assistance for correction of out-of-tolerance conditions.

5. INSTRUCTIONS

NOTE

An overview of the process for maintaining operating area logs and records is shown in Appendix 1, Operating Area Logs and Records Flow Chart.

5.1 General Requirements

- 5.1.1 Logs used in RFP facilities are titled on the outside front cover and sequentially numbered on each page.
- 5.1.2 Logs used in RFP facilities have horizontally ruled pages.
- 5.1.3 If approved by the OM, customized log forms may be used to accommodate specific applications.

5.2 Log Content Requirements

- 5.2.1 Record or log the following type of information:
 - (1) Major equipment status changes
 - (2) Major system and equipment testing
 - (3) Personnel accidents or injuries
 - (4) Entry conditions and actions taken in response to operational limits requirements
 - (5) OSR action verification
 - (6) Initiation and completion of an OSR remedial action statement
 - (7) Potentially reportable occurrences in accordance with 1-10000-ADM-16.01, Occurrence Reporting Process
 - (8) Significant events, such as unexpected power outages or radiation releases

5.2.1 (continued)

- (9) Implementation of the Emergency Plan
- (10) Security incidents
- (11) Applicable equipment parameters including Out-of-tolerance readings
- (12) Nonconformance Reports (NCRs)
- (13) Number (when known), brief description and initiator of Deficiency Reports (DRs), and/or Work Orders identified during shift
- (14) Signatures of oncoming and offgoing personnel documenting shift relief and turnover activities
- (15) Other pertinent information as determined by the OM

5.2.2 Document events as completely as possible and communicate information as clearly as possible to ensure a high level of understanding by log readers.

5.2.3 Record information promptly in logs to avoid lack of accuracy or completeness that often results from delayed entries.

5.2.4 Immediately report violation of an LCO to the SM and the OM.

5.2.5 Unusual, abnormal, or unexpected conditions are:

- (1) Entered into the appropriate log by operations and support personnel.
- (2) Reported to the SM and immediate foreman/supervisor by operations and support personnel.
- (3) Resolved according to guidance provided by the foreman/supervisor.

- 5.2.6 Ensure logkeeping does not take precedence over controlling and monitoring the facility during occurrences and emergencies, but log as much significant information as possible to aid in event reconstruction.

5.3 Log Entry Requirements

- 5.3.1 Start log entries for the first shift of each calendar day with the date at the top of a new page.

- 5.3.2 Make log entries that:

- (1) Are in black waterproof ink so they are reproducible using photocopiers in or near the area where the logs and records are maintained.
- (2) Are prefaced with the time in 24-hour or military format.
- (3) Are consecutive.
- (4) If more than two blank lines are left, draw a diagonal line between entries to avoid inadvertently entering information out of sequence.
- (5) If late insertion of information is necessary, are prefaced by the actual time of occurrence and marked LATE ENTRY.

- 5.3.3 Circle in red waterproof ink any abnormal readings, out-of-tolerance readings, and the time of their occurrence.

- 5.3.4 Make corrections to entries by:

- (1) Drawing a single line through the entry.
- (2) Inserting the correct information as close as possible to the original entry.
- (3) Not using correction fluid, correction tape, erasers, or any other correction method which obliterates, obscures, or removes the original entry; thereby ensuring that the original entry is readable after completing the correction.

5.3.4 (continued)

- (4) Initialing and dating the correction.

5.3.5 When the individual making an original entry is not available, appropriate management may correct logs and records by entering the manager's signature, date, time, and name of individual making original entry.

5.4 Required Logs and Records

5.4.1 Chronological Log

5.4.1.1 Chronological logs are maintained:

- (1) As a minimum, by the facility SM and STA.
- (2) At work stations manned on a part-time basis to ensure pertinent information is passed from operator to operator.
- (3) By other key shift positions designated by the OM.

5.4.1.2 To ensure information is being recorded legibly, clearly, promptly, correctly, and completely, review of chronological logs is performed by the:

- (1) Foreman/supervisor periodically during the shift.
- (2) SM and STA at least once per shift.
- (3) OM at least weekly.

5.4.2 Temporary Modification Log

- 5.4.2.1 Temporary changes to systems, processes, or components are controlled and requested by completing the Temporary Modification Request Form, Appendix 3.
- 5.4.2.2 The associated design package is created in accordance with a controlled Engineering procedure.
- 5.4.2.3 Each facility maintains a temporary modification log that includes:
- (1) Temporary Modification Log Sheet, Appendix 2.
 - (A) TMP#
 - (B) Revision #
 - (C) Expiration Date
 - (D) Affected Equipment
 - (E) Installed Date
 - (F) Restored Date
 - (G) All Affected Documents Returned To Normal.
 - (2) Request that includes summary description of the temporary modification and method used on Appendix 3.
 - (A) TMP#
 - (B) Revision #
 - (C) Expiration Date
 - (D) VSS Affected
 - (E) Affected Equipment and functions
 - (F) Reason for Modification
 - (G) Requested By
 - (H) Comments
 - (I) WCF Number
 - (J) Shift Managers signature
 - (K) Authorized duration (not to exceed 3 months).

94-DMR-001161

94-DMR-001161

- (3) Temporary Modification Tag Sheet, Appendix 4, to identify tag numbers to which attached.
 - (A) TMP#
 - (B) Choose tag type:
 - i) DAA - Disabled Annunciator Alarm
 - ii) MJ - Mechanical Jumper
 - iii) PCC- Pulled Circuit
 - iv) EJ - Electrical Jumper
 - v) LL - Lifted Lead
 - vi) BF - Blank Flange
 - vii) O - Other
 - (C) Tag Number
 - (D) Location
 - (E) Description
- (4) Temporary Modification Extension Request, Appendix 5.
 - (A) TMP#
 - (B) Revision #
 - (C) Current TMP Expiration Date
 - (D) Reason for Extension
 - (E) New TMP Expiration Date
 - (F) Signature of submitter
 - (G) Signature from System Engineer Manager, Operations Manager, and Cognizant Design Engineer Manager
 - (H) IF ORC review is required by Appendix 3 of 1-52000-ADM-02.01.
THEN get signature of ORC Chairman.
- (5) Temporary Modification Tag, Appendix 6. Can be obtained through the Shift Manager.
 - (A) TMP#
 - (B) Tag Number
 - (C) Location
 - (D) Description
 - (E) Installed by
 - (F) Installation current date
 - (G) Verified
 - (H) Verification current date.

5.4.2.4

When the temporary modification is removed, the SM records date and time of removal in the blank lines provided.

94-DMR-001161

- 5.4.2.5 The SM and responsible foreman or supervisor review the Temporary Modification Log at least once per shift to ensure information recorded is:
- (1) Legible.
 - (2) Clear.
 - (3) Correct.
 - (4) Complete.
- 5.4.2.6 The SM reviews the Temporary Modification Log at least once each week to identify any temporary modifications that have been in place more than 3 months.
- 5.4.2.7 The SM reports to OM in writing any temporary modifications in effect for more than 3 months and obtains guidance for corrective action.
- 5.4.2.8 The OM ensures that a physical check of all temporary modifications is made monthly. The check includes verifying:
- (1) The temporary modification is installed properly and is in good condition.
 - (2) The Temporary Modification Tags are attached and are in good condition.
 - (3) Completion of this check is noted in the comments section of the Temporary Modification Request Form and any discrepancies are reported to the SM immediately.

94-DMR-001161

- (4) Review restored temporary modification and associated documentation for accuracy and completeness and provide for lifetime storage of documents.
- (5) Inform DE or SE if a Temporary Modification Extension Request needs to be filed.

5.4.3 **Lockout/Tagout Permit Log**

- 5.4.3.1 Lockout/tagout logs are maintained as required by 1-15320-HSP-2.08, Lockout/Tagout.
- 5.4.3.2 The SM maintains completed and approved lockout/tagout permits involving the facility in a loose-leaf binder at the same location as the lockout/tagout log.
- 5.4.3.3 When the lockout/tagout is cleared, removes the lockout/tagout permit from the loose-leaf binder and processes it in accordance with 1-15320-HSP-2.08.

5.4.4 **Deficiency/Work Control Log**

- 5.4.4.1 As a minimum, each facility which is normally manned maintains a deficiency/work control log.

- 5.4.4.2 The deficiency/work control log may be a computerized data base in accordance with the 1-74000-IWCP-1, Work Control Form Processing.
- 5.4.4.3 Each log contains:
- (1) Work Control Number.
 - (2) Description of the deficiency.
 - (3) Initiation date.
- 5.4.4.4 The SM makes a deficiency/work control log entry for each deficiency submitted.
- 5.4.4.5 Updates the log as deficiencies are closed by entering CLOSED ON (DATE) directly under the deficiency/work control number.
- 5.4.4.6 To ensure that information is being recorded legibly, clearly, promptly, correctly, and completely, review of deficiency/work control logs is performed by the:
- (1) Foreman/supervisor periodically during the shift.
 - (2) SM and STA at least once per shift.
- 5.4.4.7 The SM reviews the deficiency/work control log at least once per month to identify any deficiencies in place more than 3 months.
- 5.4.5 **Alarm Deactivation Log**
- 5.4.5.1 Alarm Deactivation Log is maintained in accordance with 1-31000-COOP-017, Controlled Deactivation of Alarms.

5.4.5.2 The OM tracks deactivated alarms to ensure reactivation is accomplished within an approved time frame and takes corrective action if not accomplished.

5.4.5.3 Reviews the alarm deactivation log monthly and maintains files of:

- (1) Permanently deactivated alarms.
- (2) Completed Alarm Deactivation Requests and Deactivated Alarm Logs.

5.4.6 **Operator Aids Posting Logs**

5.4.6.1 Operator aids posting logs are maintained in accordance with 1-31000-COOP-010, Control of Operator Aids.

5.4.6.2 The OM reviews the operator aids posting logs periodically or when new or revised governing procedures are made effective, and takes appropriate corrective action to ensure that:

- (1) All postings and signs are applicable, correct, and current.
- (2) The log accurately reflects the postings and signs in use.

5.5 **Reviews**

5.5.1 Reviews of logs are performed as required in Subsection 5.4 and documented at the end of the reviewed portion of the log by:

- (1) The reviewer's signature for shift and daily reviews.
- (2) The date, time, and reviewer's signature and title for all other reviews.

6. RECORDS

6.1 Completed logs are retained in the SM's duty station, or other location determined by the OM, until final disposition to ensure:

- (1) Protection from loss or damage.
- (2) Retrievability for review by operators, such as for review after an absence or for event reconstruction.

6.2 The OM ensures all completed logs and records are dispositioned in accordance with the 1-77000-RM-001, Records Management Guidance for Records Sources.

7. REFERENCES

7.1 Department of Energy (DOE) Order 5480.19, Conduct of Operations

7.2 Institute of Nuclear Power Operations (INPO) 85-017, Guidelines for the Conduct of Operations at Nuclear Power Stations, Chapter XI, 04/88

7.3 1-10000-ADM-16.01, Occurrence Reporting Process

7.4 1-15320-HSP-2.08, Lockout/Tagout

7.5 1-31000-COOP-001, Conduct of Operations

7.6 1-31000-COOP-010, Control of Operator Aids

OPERATING AREA
LOGS AND
RECORDS

10/26/95

1-31000-COOP-006
REVISION 0
PAGE 16 OF 17

- 7.7 1-31000-COOP-017, Controlled Deactivation of Alarms
- 7.8 1-48000-QAR-001, Quality Assurance Records
- 7.9 1-52000-ADM-02.01, Operations Review Committee Requirements
- 7.10 1-74000-IWCP-1, Work Control Form Processing

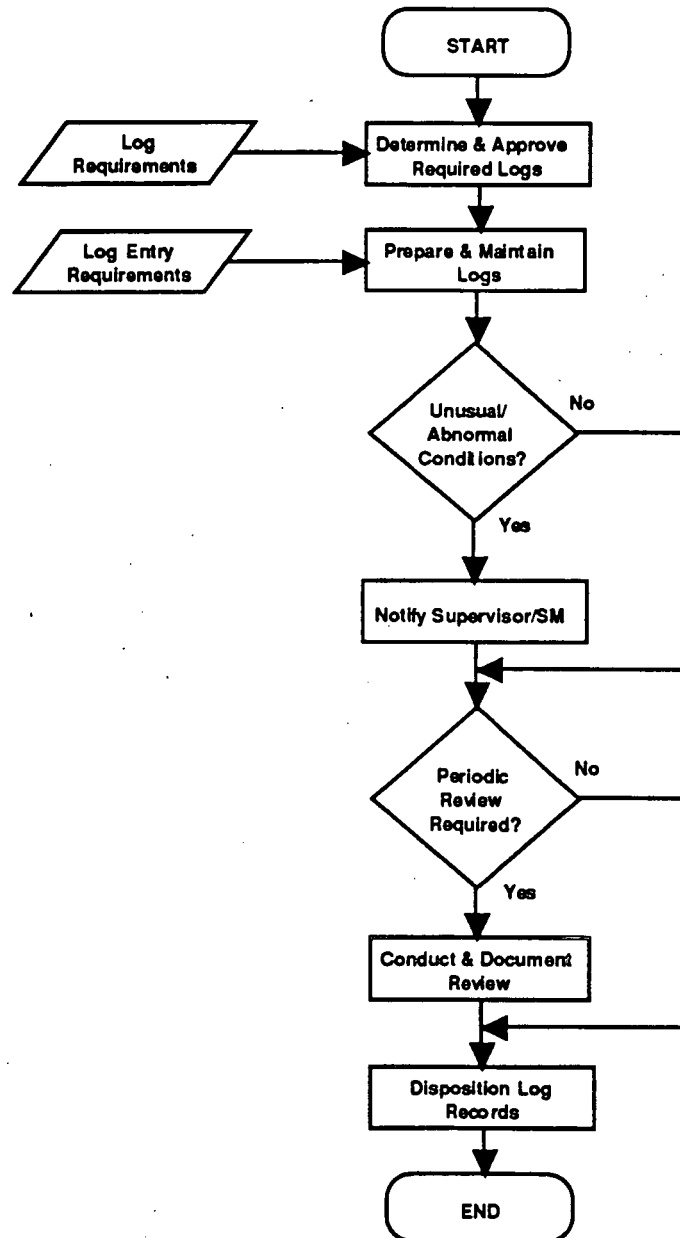
95-DMR-000997

94-DMR-000122

APPENDIX 1

Page 1 of 1

OPERATING AREA LOGS AND RECORDS FLOW CHART



94-DMR-001161

APPENDIX 3

Page 1 of 1

TEMPORARY MODIFICATION REQUEST FORM

Temporary Modification Request Form		
No. _____	Rev.: _____	Expiration Date: _____
VSS Affected	Yes	No (Circle One)
Affected Equipment and Functions:		

Reason for Modification:		

Requested By:		
_____	_____	_____
Print Name	Signature	Date
Comments:		

WCF No.: _____		
Shift Manager:		
_____	_____	_____
Print Name	Signature	Date
(Shift Manager signature indicates that this Request is accepted as a Potential Temporary Modification, pending further review.)		

94-DMR-001161

APPENDIX 4
Page 1 of 2

TEMPORARY MODIFICATION TAG SHEET

TEMPORARY MODIFICATION TAG SHEET
PAGE ____ OF ____

TMP NO.: _____

Tag Types	DAA MJ O	- Disabled Annunciator Alarm - Mechanical Jumper - Other	PCC EJ	- Pulled Circuit Card - Electrical Jumper	LL BF	- Lifted Lead - Blank Flange
-----------	----------------	--	-----------	--	----------	---------------------------------

Tag # _____	Type _____ Location: _____ Description: _____	To Tag # _____
Tag # _____	Type _____ Location: _____ Description: _____	To Tag # _____
Tag # _____	Type _____ Location: _____ Description: _____	To Tag # _____
Tag # _____	Type _____ Location: _____ Description: _____	To Tag # _____
Tag # _____	Type _____ Location: _____ Description: _____	To Tag # _____
Tag # _____	Type _____ Location: _____ Description: _____	To Tag # _____
Tag # _____	Type _____ Location: _____ Description: _____	To Tag # _____

NOTE: Use additional sheets as required.

94-DMR-001161

APPENDIX 4
Page 2 of 2

**INSTRUCTIONS FOR PREPARATION OF A TM TAG SHEET AND INSTRUCTIONS
FOR PREPARATION OF A TM TAG**

INSTRUCTIONS FOR COMPLETION OF A TM TAG SHEET

- **TMP NO.:** TMP number.
- **Tag No.:** Tag number (such as 1, 2, 3)
- **Location:** Give a brief, general description of the location such as Building number, floor, room number, Northeast corner, etc.
- **Description:** Include the following information:
 - Disabled Annunciator Alarm (DAA) - panel name, number, window location, window nomenclature.
 - Lifted Lead (LL) - cabinet name, number, terminal block number, terminal number, wire number.
 - Electrical Jumper (EJ) - cabinet name, number, terminal block number, to tag # (if applicable).
 - Pulled Circuit Card (PCC) - cabinet name, number, circuit card.
 - Mechanical Jumpers (MJ) - location, line number or valve number, to tag # (if applicable).
 - Blank Flange (BF) - location, line number or flange number.
 - Other (O) - identify type of device, provide enough information for location and evaluation of the temporary modification and to tag # (if applicable).
- **Tag Types:** Such as Disabled Annunciator Alarm (DAA), Lifted Lead (LL), Electrical Jumper (EJ).
- **To Tag # :** Jumpers that are of such length that both ends are not visible when installed will have a temporary modification tag attached to each end. Indicate the tag number at the other end of the jumper in the **To Tag #** block. For shorter jumpers or other modifications, enter N/A. For short jumpers with only one tag enter information about both ends of the jumper.

INSTRUCTIONS FOR COMPLETION OF A TM TAG

NOTE: Use information from the TM Tag Sheet to fill out Tags.

- **TMP NO.:** TMP number.
- **Tag No.:** Tag number (such as 1, 2, 3)
- **Location:** Give a brief, general description of the location such as Building number, floor, room number, Northeast corner, etc.
- **Description:** Include the following information:
 - Disabled Annunciator Alarm (DAA) - panel name, number, window location, window nomenclature.
 - Lifted Lead (LL) - cabinet name, number, terminal block number, terminal number, wire number.
 - Electrical Jumper (EJ) - cabinet name, number, terminal block number, to tag # (if applicable).
 - Pulled Circuit Card (PCC) - cabinet name, number, circuit card.
 - Mechanical Jumpers (MJ) - location, line number or valve number, to tag # (if applicable).
 - Blank Flange (BF) - location, line number or flange number.
 - Other (O) - identify type of device, provide enough information for location and evaluation of the temporary modification and to tag # (if applicable).
- **Installed by:** Indicate name of individual installing the tag.
- **Date:** Date of installation of tag.
- **Verified by:** Name of individual verifying the installation of the tag.
- **Date:** Date installation was verified.

94-DMR-001161

APPENDIX 5

Page 1 of 1

TEMPORARY MODIFICATION EXTENSION REQUEST

TEMPORARY MODIFICATION EXTENSION REQUEST

TMP NO.: _____ REV.: _____

Current TMP Expiration Date: _____

Reason for Extension: _____

New TMP Expiration Date: _____

Submitted by: _____
Signature Date

Approved: _____
System Engineer Manager Date

Approved: _____
Operations Manager Date

Approved _____
Cognizant Design Engineering Manager Date

Approved _____
ORC Chairman (if required by ADM 02.01) Date

94-DMR-001161

APPENDIX 6

Page 1 of 1

TEMPORARY MODIFICATION TAG

TEMPORARY MODIFICATION TAG	
TMP NO.:	_____
Tag No.:	_____
Location:	_____ _____ _____
Description:	_____ _____ _____ _____
Installed by:	_____
Date:	_____
Verified by:	_____
Date:	_____

DOCUMENT MODIFICATION REQUEST (DMR)

PAGE 1 of 1

Refer to 1-A01-PPG-001 for Processing Instructions.
Print or Type All Information (Except Signatures).

1. Date
10/29/93

2b
DMR No. 93-DMR-13-DMR000794

2. Existing Document Number/Revision 1-31000-COOP-007, Rev. 0	3. New Document Number or Document Number if it is to be changed with this Revision N/A
4. Originator's Name/Phone/Page/Location G.W. Tasset, X3414, Bldg. 850	5. Document Title Shift Relief and Turnover

6. Document Type <input checked="" type="checkbox"/> Procedure <input type="checkbox"/> Other	7. Document Modification Type (Check only one) <input type="checkbox"/> New <input type="checkbox"/> Revision <input checked="" type="checkbox"/> Intent Change <input type="checkbox"/> Nonintent Change <input type="checkbox"/> Editorial Correction <input type="checkbox"/> Cancellation
---	--

8. Item	9. Page	10. Step	11. Proposed Modifications
1	1A		Add list of effective pages.
2	8A	5.4.1.9-12	Add tasks to specify security key control requirements.
	9	5.4.2.6-87	
	11	5.4.4.4-87	
3	12	7.6	Add reference for security key control.

12. Justification (Reason for Modification, EJO #, TP #, etc.)

- To comply with new PPG requirements.
- To correct contributing cause to Occurrence Report: RFO-EGGR-SUPPORT-1993-0022, CAR-4.
- Same comment as 2.

If modification is for a new procedure or a revision, list concerning discrepancies in Block 13, and enter N/A in Blocks 14 and 15. If modification is for any type of change or cancellation, organizations are listed in Block 13, then Concurator prints, and signs in Block 14, and dates in Block 15.

13. Organization	14. Print, Sign (if applicable)	15. Date (if applicable)
A&P	ISI J. H. Green	11/5/93
E&T	ISI F. S. Herman	11/9/93
ERM	ISI D. S. [unclear] for J. H. [unclear]	
E&WM	ISI J. A. [unclear]	11/10/93
FM&O	ISI R. H. [unclear]	11/9/93
M&PS	ISI D. M. [unclear]	11/8/93
PBT	ISI A. W. [unclear]	11/10/93
SS&S	ISI T. W. [unclear]	11/9/93
SA&A	ISI [unclear] and J. G. [unclear]	11/7/93
TM	ISI G. E. [unclear]	11/8/93

16. Originator's Supervisor (print/sign/date) J. P. FLOERKE JPF 11-2-93				
17. Assigned SME/Phone/Page/Location G.W. Tasset, X3414, d4491, Bldg. 77850-850	18. EOC Center 488 1375	19. Charge Number 99008930	20. Requested Completion Date 12/17/93	21. Effective Date 12/17/93
22. Active trac review Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		23. ORC Review SARC-95-88 [Signature] 12/8/93		
24. Response Manager (print/sign/date) [Signature] 12/8/93				

REVIEWED FOR CLASSIFICATION / UCM

BY [Signature] V/W

DATE 11-3-93

RF-47940 (5/93)

COPY 100-00447

Rocky Flats Plant

1-31000-COOP-007

REVISION 0

SHIFT RELIEF AND TURNOVER

APPROVED BY: *J. C. Zane* 1/10/9/92 Responsible Organization: Plutonium Production
General Manager, Rocky Flats Plant Date

Effective Date: October 27, 1992

CONCURRENCE:

/s/ G. E. Marx 1/9/3/92
Associate General Manager, Administration and Planning Date

/s/ H. S. Berman 1/9/17/92
Associate General Manager, Engineering Date

/s/ J. M. Kersh 1/9/7/92
Associate General Manager, Environmental Restoration Management Date

/s/ J. M. Kersh 1/9/7/92
Associate General Manager, Environmental and Waste Management Date

/s/ F. H. Ideker 1/9/2/92
Associate General Manager, Facility Management and Operations Date

/s/ D. W. Ferrera 1/9/10/92
Associate General Manager, Maintenance and Plant Support Date

/s/ L. C. Smith for J. G. Davis 1/9/8/92
Associate General Manager, Performance and Quality Assurance Date

/s/ J. H. Riley 1/9/18/92
Associate General Manager, Plant Safety and Security Date

¹⁰⁻⁰⁶⁻⁹²
Spencer Williams 1/10/06/92
Site Operations Review Committee Chairman Date

[Signature] 1/9/1/92
Subject Matter Expert Date

**AFFECTS PLANT SAFETY
PROCEDURE USE CATEGORY 3
CONTROLLED COPY**

The following PRRs have been incorporated in this revision:
92-PRR-000590

This procedure supersedes procedure COOP-007, Revision 1.

PADC-92-00447

Reviewed for Classification

By *Dr. Suttler - WWS*

Date 10-6-92

12/17/93

LIST OF EFFECTIVE PAGES

<u>Pages</u>	<u>Effective Date</u>	<u>Change Number</u>
1	10/27/92	
1A	12/17/93	93-DMR-000784
2-8	10/27/92	
8A-9A	12/17/93	93-DMR-000784
10	10/27/92	
11-12	12/17/93	93-DMR-000784
13-14	10/27/92	

TOTAL NUMBER OF PAGES: 17

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
TITLE	1
TABLE OF CONTENTS	2
1. PURPOSE	3
2. SCOPE	3
3. DEFINITIONS	3
4. RESPONSIBILITIES	3
4.1 Operations Manager	3
4.2 Shift Manager (SM)	4
4.3 Shift Technical Advisor	4
4.4 Foreman/Supervisor	4
4.5 Operations and Support Personnel	5
5. INSTRUCTIONS	6
5.1 Operations Activities Requiring Shift Relief and Turnover	6
5.2 Maintaining Operating Status Awareness	7
5.3 Developing a Shift Relief and Turnover Checklist	7
5.4 Conducting Shift Relief and Turnover	8
5.4.1 Oncoming and Offgoing SM	8
5.4.2 Oncoming and Offgoing Foreman/Supervisor	9
5.4.3 Offgoing Shift Personnel	9
5.4.4 Oncoming Shift Personnel	10
5.4.5 Oncoming and Offgoing STA	11
5.5 Conducting Shift Relief and Turnover Prior to Resuming Operations or When Operations are Being Suspended	11
5.6 Relief of Duty During Shift	12
6. RECORDS	12
7. REFERENCES	12
<u>Appendices</u>	
Appendix 1, Shift Relief and Turnover Flow Chart	13
Appendix 2, Sample Shift Relief and Turnover Checklist	14

1. **PURPOSE**

- 1.1 This procedure provides requirements, guidelines, and actions to be taken during shift relief and turnover to ensure effective communication of system and process operating parameters, routine and scheduled shift activities, and unusual or off-normal conditions.

2. **SCOPE**

- 2.1 This procedure applies to shift relief and turnover for support processes, production, and utility activities and operations.
- 2.2 This procedure describes all activities, processes, and operations that must be in compliance with the requirements of this procedure unless justified in writing and approved by the Operations Manager (OM) and appropriate functional manager.

3. **DEFINITIONS**

- 3.1 **Shift Relief and Turnover Checklist.** A checklist that outlines the minimum requirements to be addressed during shift turnover.

4. **RESPONSIBILITIES**

4.1 **Operations Manager**

- 4.1.1 Establishes and maintains an approved list of operations and support groups required to perform shift relief and turnover.
- 4.1.2 Reviews and approves or rejects requests for exception from the requirements of this procedure.

- 4.1.3 For buildings without requirements for Shift Technical Advisors (STAs), assigns similar duties to other individuals.

4.2 Shift Manager (SM)

- 4.2.1 Ensures that the shift relief and turnover process is effectively implemented.
- 4.2.2 Maintains awareness of system and process operating parameters, routine and scheduled shift activities, and unusual or off-normal conditions.
- 4.2.3 Concurs and submits exception requests to OM for exception from the requirements of this procedure.

4.3 Shift Technical Advisor

- 4.3.1 Provides technical assistance and counsel to operations personnel if assigned to the building (assignment is on a case-by-case basis only).
- 4.3.2 Maintains awareness of equipment operating status and performance trends, routine and scheduled activities, and off-normal conditions.
- 4.3.3 Conducts or participates in shift relief and turnovers to effectively communicate all necessary information concerning the status of operations, processes, equipment, systems, scheduled activities, and unusual or off-normal conditions to comply with this procedure.

4.4 Foreman/Supervisor

- 4.4.1 Maintains awareness of system and process operating parameters, routine and scheduled activities, and unusual or off-normal conditions.

- 4.4.2 Prepares in advance a Shift Relief and Turnover Checklist including system and process operating parameters, equipment status, scheduled shift activities, and unusual or off-normal conditions.
 - 4.4.3 Specifies the positions or areas to be relieved by oncoming personnel.
 - 4.4.4 Conducts a shift relief and turnover briefing allowing sufficient time for offgoing and oncoming management and supervisory personnel to fully communicate operational status using the Shift Relief and Turnover Checklist.
- 4.5 **Operations and Support Personnel**
- 4.5.1 Prepare in advance a Shift Relief and Turnover Checklist including system and process operating parameters, equipment status, scheduled shift activities, and unusual or off-normal conditions, as required.
 - 4.5.2 Conduct or participate in shift relief and turnovers for assigned areas of responsibility, and effectively communicate all necessary information on system and process operating parameters, equipment status, scheduled shift activities, and unusual or off-normal conditions using the Shift Relief and Turnover Checklist.
 - 4.5.3 Personally verify the status of important system operating parameters, especially those related to safety systems.
 - 4.5.4 Review and understand all logs and checklists applicable to the shift position prior to assuming the shift.

5. INSTRUCTIONS

NOTES

1. *An overview of the process is shown in Appendix 1, Shift Relief and Turnover Flow Chart.*
2. *Signatures, dates, and data documented on records or documents which become permanent records are to be legible and made with black or blue-black indelible ink.*

5.1 Operations Activities Requiring Shift Relief and Turnover

- 5.1.1 The responsible OM establishes and maintains a list of support, production, and utility operations activities required to perform shift relief and turnover in accordance with this procedure.
- 5.1.2 Identifies key positions or activities that require shift relief and turnover agendas.
- 5.1.3 Reviews and approves or rejects requests for exception from the requirements of this procedure.
- 5.1.4 Performs a Biennial Review of the list of operations that require shift relief and turnover and revises as appropriate.
- 5.1.5 The responsible SM identifies key positions that require written acknowledgement that shift responsibilities have been accepted and shift relief and turnover has been completed.

5.2 Maintaining Operating Status Awareness

- 5.2.1 To facilitate shift relief and turnover, the SM, STA, Foreman/Supervisor, and operations and support personnel maintain awareness of system and process operating parameters, equipment status, routine and scheduled shift activities, and unusual or off-normal conditions within assigned area of responsibility.
- 5.2.2 Use operator rounds sheets, chronological logs, Plan of the Day (POD) checklist, Shift Relief and Turnover Checklist, and the Systems Status Board for maintaining operations status awareness.

5.3 Developing a Shift Relief and Turnover Checklist

- 5.3.1 The OM assigns responsibility for development of shift relief and turnover agendas to designated Foreman/Supervisors.
- 5.3.2 Reviews and provides concurrence with shift relief and turnover agendas for shift changes that include complex operations and unusual or off-normal conditions.
- 5.3.3 Performs random reviews of shift relief and turnover agendas to ensure adequacy and accuracy of content and initials the agendas to signify review.
- 5.3.4 Ensures the Foreman/Supervisor develops shift relief and turnover agendas to include current shift operational status using Appendix 2, Sample Shift Relief and Turnover Checklist as a guide.

5.4 Conducting Shift Relief and Turnover

5.4.1 Oncoming and Offgoing SM

- 5.4.1.1 Conduct a shift relief and turnover briefing, which includes supervisory and operations personnel, for all shift changes that include complex and unusual or off-normal operations.
- 5.4.1.2 Ensure that shift relief and turnover briefings for less significant operations are conducted by designated individuals.
- 5.4.1.3 Ensure shift relief and turnover briefings occur directly between oncoming and offgoing shift personnel involved in routine shift activities, including joint walkdown of control areas.
- 5.4.1.4 Ensure shift relief and turnover agendas have space for the offgoing shift personnel to list important information for oncoming shift personnel in key positions and activities.
- 5.4.1.5 Monitor the effectiveness of the shift relief and turnover process and initiate changes as required to increase effectiveness.
- 5.4.1.6 Remain alert for oncoming shift personnel who appear unfit for duty and take appropriate actions to verify fitness prior to allowing turnover.
- 5.4.1.7 Remain on shift until all required relief and turnover activities have been completed or appropriately addressed.
- 5.4.1.8 Document in the SM narrative log that responsibility has been accepted and relief has been completed.

613-DNR-000784

- 5.4.1.9 Verify that the number of keys on the security key ring(s) matches the number stamped on the corresponding control tag on each ring for which the SM is responsible.
- 5.4.1.10 Verify that the overall integrity of the security key ring(s) is intact.
- 5.4.1.11 Document the transfer of responsibility for the security keys in the SM narrative log in accordance with 1-70735-SEC-5.1, Locks and Keys.
- 5.4.1.12 Report any discrepancies found in the keys or key rings in accordance with 1-70735-SEC-5.1.

5.4.2 Oncoming and Offgoing Foreman/Supervisor

- 5.4.2.1 Ensure effective communication of shift operational status between oncoming and offgoing shift personnel.
- 5.4.2.2 Conduct or participate in the shift relief and turnover process.
- 5.4.2.3 Near the end of the shift and as soon as practical after coming on shift, review shift log entries, rounds sheets, and other shift records and documents the records to signify review.
- 5.4.2.4 Report new information or instructions to shift personnel.
- 5.4.2.5 For key positions or activities, complete shift relief and turnover agendas and document in the log that responsibility has been accepted and relief has been completed.
- 5.4.2.6 Verify that the number of keys on the security key ring(s) matches the number stamped on the corresponding control tag on each ring for which the Foreman/Supervisor is responsible.
- 5.4.2.7 Verify that the overall integrity of the security key ring(s) is intact.
- 5.4.2.8 Document the transfer of responsibility for the security keys in the shift log in accordance with 1-70735-SEC-5.1.
- 5.4.2.9 Report any discrepancies found in the keys or key rings in accordance with 1-70735-SEC-5.1.

5.4.3 Offgoing Shift Personnel

- 5.4.3.1 Leave shift only after being relieved by oncoming personnel unless specifically authorized by the offgoing Supervisor.

93-DMR-000784

93-DMR-000784

- 5.4.3.2 Document in the log that relief has been completed.
- 5.4.3.3 Are knowledgeable of the operating status for activities, processes, or equipment within assigned area.
- 5.4.3.4 Communicate operational status to oncoming shift personnel.
- 5.4.3.5 Ensure that questions from oncoming shift personnel have been adequately answered or referred to the next level supervision.

- 5.4.3.6 Receive confirmation that adequate information is provided to oncoming shift personnel to ensure safe and efficient continuation of activities.
- 5.4.3.7 If oncoming shift personnel require additional time, remain on shift until the necessary information is provided and all questions are answered.
- 5.4.3.8 Remain on shift if the oncoming shift person appears unfit to assume shift duties, and immediately notify the responsible manager.

5.4.4 Oncoming Shift Personnel

- 5.4.4.1 Obtain necessary information on the status of system and process operating parameters, equipment, scheduled shift activities, and unusual or off-normal conditions to ensure a safe and effective individual relief or shift turnover.
- 5.4.4.2 Review the following to be aware of shift operating status:
 - (1) Shift log entries
 - (2) Rounds sheets
 - (3) Systems Status Board
 - (4) Standing Orders
 - (5) Shift Orders
 - (6) Operations Orders
 - (7) Other shift records as necessary

93-DMR-000784

5.5.2 Perform a walkdown of assigned areas.

NOTE

At the beginning of each shift, the opening entries in all logs include plant and equipment status.

5.5.3 Complete applicable checklists and agendas.

93-DMR-000784

- 5.4.4.3 For key positions or activities, complete shift relief and turnover agendas, and document in the log that responsibility has been accepted and relief has been completed.
- 5.4.4.4 Verify that the number of keys on the security key ring(s) matches the number stamped on the corresponding control tag on each ring for which the Shift Personnel are responsible.
- 5.4.4.5 Verify that the overall integrity of the security key ring(s) is intact.
- 5.4.4.6 Document the transfer of responsibility for the security keys in the shift log in accordance with 1-70735-SEC-5.1.
- 5.4.4.7 Report any discrepancies found in the keys or key rings in accordance with 1-70735-SEC-5.1.

5.4.5 Oncoming and Offgoing STA

- 5.4.5.1 Review rounds sheets for status, condition, and equipment performance trends at least once per shift, and document records to signify review.
- 5.4.5.2 Conduct a shift relief and turnover briefing detailing the operational status of all equipment.
- 5.4.5.3 Document in the STA narrative log that relief has been completed.

5.5 Conducting Shift Relief and Turnover Prior to Resuming Operations or When Operations are Being Suspended

- 5.5.1 When operations are just beginning and a shift relief and turnover will not occur, all oncoming shift personnel review all applicable logs for the 24 hours preceding suspension of operations.

- 5.5.4 When operations are suspended at the end of the shift and a shift relief and turnover will not occur, offgoing shift personnel close out all applicable logs and rounds sheets indicating the status of the plant and assigned equipment.

5.6 Relief of Duty During Shift

- 5.6.1 The requirements for relief of duty during the shift are the same as those for shift relief in Subsections 5.4 and 5.5.

6. RECORDS

- 6.1 Records generated by this procedure are retained in accordance with Rocky Flats Plant (RFP) Records Management Manual and RFP Quality Assurance Manual.

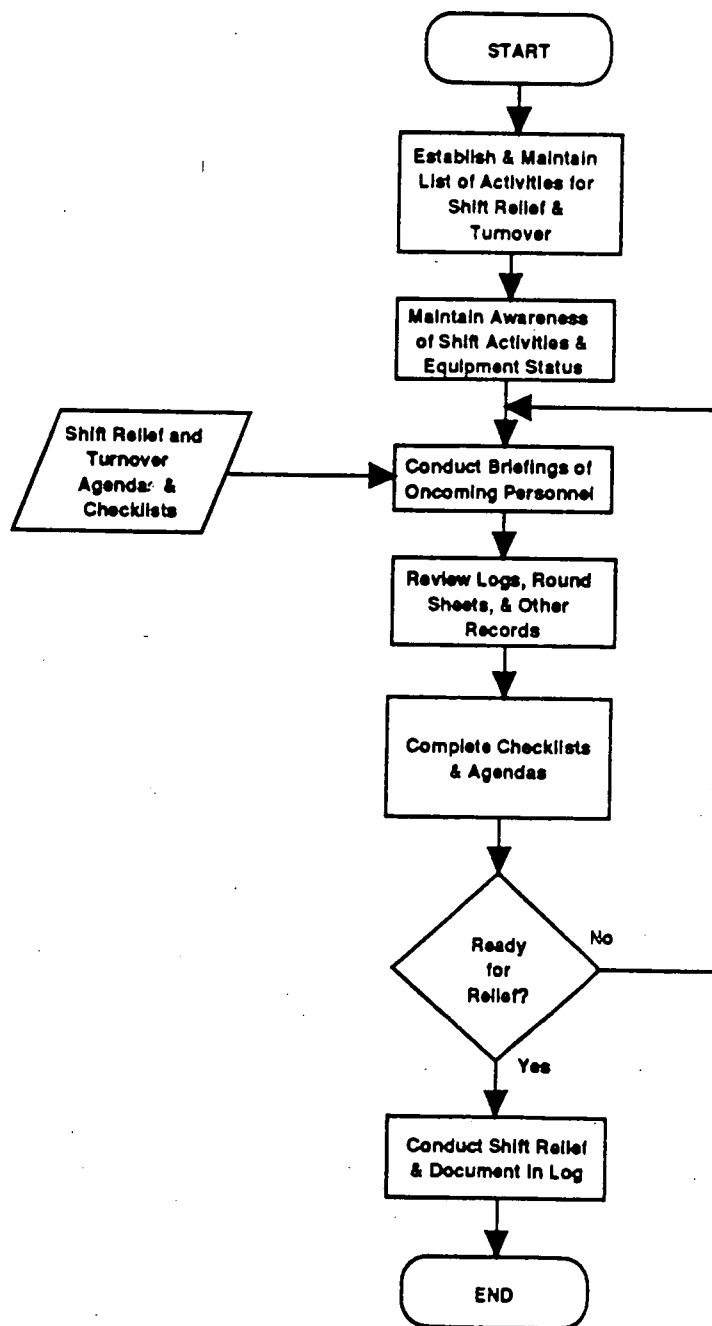
7. REFERENCES

- 7.1 Department of Energy (DOE) 5480.19, Conduct of Operations Requirements for DOE Facilities (07/09/90)
- 7.2 Institute of Nuclear Power Operations (INPO) 85-017, Guidelines for the Conduct of Operations at Nuclear Power Stations (04/88)
- 7.3 Plutonium Operations Phased Resumption Management Plan (POPRMP), Appendix D; Equipment/Material Conditions, Team 5
- 7.4 RFP Quality Assurance Manual
- 7.5 RFP Records Management Manual
- 7.6 1-70735-SEC-5.1, Locks and Keys

93-DMR-000784

APPENDIX 1
Page 1 of 1

SHIFT RELIEF AND TURNOVER FLOW CHART



APPENDIX 2

Page 1 of 1

SAMPLE SHIFT RELIEF AND TURNOVER CHECKLIST

1. Status of Respirator Required Areas (if applicable)
2. Significant issue discussion (if necessary)
3. Plan of the Day shift review and group reports:
 - (1) Plan of the Day review
 - (2) Systems Status Board review
 - (3) Process/Job status and procedural steps
 - (4) Change to process/job variables
 - (5) Unusual conditions
 - (6) Equipment problems and resolution
 - (7) Equipment placed in/out of service
 - (8) Equipment alarm conditions
 - (9) Special procedures in use
 - (10) Other significant information such as LCOs, remedial action statements in effect, maintenance activities being performed
 - (11) Prior shift review
 - (12) Radiological and other hazardous conditions
 - (13) Waste and environmental conditions
4. General comments from Operations management
5. Final wrap up

The shift relief and turnover checklist is used during all turnovers between and during shifts.

Approved By: _____

Operations Manager

Date

Rocky Flats Plant

1-31000-COOP-008

REVISION 0

CONTROL OF CAUTION TAGS

APPROVED BY: J. C. Zane 16/30/92 Responsible Organization: Plutonium Production
General Manager, Rocky Flats Plant Date

Effective Date: 07/15/92

CONCURRENCE:

L. E. Marx 16/24/92
Assistant General Manager, Administration and Planning Date

John R. Adams 16/24/92
Associate General Manager, Environmental and Waste Management Date

J. G. Tamm 16/24/92
Assistant General Manager, Non-Plutonium Operations Date

W. J. Pizzuto 16/26/92
Assistant General Manager, Performance-Based Training Date

W. J. Pizzuto 16/26/92
Assistant General Manager, Plutonium Recovery Date

W. A. Kirby 6/26/92
Assistant General Manager, Quality Assurance Date

D. W. Fennell 6/29/92
Assistant General Manager, Technical Support Date

Mark J. Koch 6/29/92
Operations Review Committee Chairman Date

V. S. Bernum 16/26/92
Assistant General Manager, Engineering Date

R. C. Cochran 16-26-92
Assistant General Manager, Health and Safety Date

John D. R... 16/27/92
Assistant General Manager, Performance Assurance Date

W. J. Pizzuto 6/26/92
Assistant General Manager, Plutonium Production Date

D. K. M... 6/30/92
Assistant General Manager, Program and Project Management Date

W. J. Pizzuto for MTR 16/26/92
Assistant General Manager, Radiation Protection Date

J. A. Lehman 16/30/92
Subject Matter Expert Date

CONTROLLED COPY

**AFFECTS PLANT SAFETY
PROCEDURE USE CATEGORY 3**

The following PRRs have been incorporated in this revision:
92-000281
92-000495

This procedure supersedes procedure COOP-008, Revision 1.

PADC-92-00630

Reviewed for Classification

By R. F. Kadluna

Date 6/30/92

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
TITLE	1
TABLE OF CONTENTS	2
1. PURPOSE	3
2. SCOPE	3
3. DEFINITIONS	3
4. RESPONSIBILITIES	4
4.1 Operations Manager (OM)	4
4.2 Shift Manager	4
4.3 Lockout/Tagout Manager	4
4.4 Tag Preparer	5
4.5 Shift Personnel	5
5. INSTRUCTIONS	6
5.1 Caution Tag Guidelines	6
5.2 Caution Tag Requests	7
5.3 Caution Tag Preparation and Approval	7
5.4 Installation of Caution Tag	9
5.5 Notification	10
5.6 Lost, Loose, Unattached, or Damaged Caution Tag	10
5.7 Caution Tag Removal	11
5.8 Review of Tags and Logs	12
6. RECORDS	12
7. REFERENCES	13
<u>Appendices</u>	
Appendix 1, Caution Tag	14
Appendix 2, Sample Caution Tag Log	15
Appendix 3, Caution Tag Flowchart	16

1. PURPOSE

- 1.1 This procedure describes the process for controlling Caution Tags to continue operating equipment and facilities when situations arise that require special temporary cautionary measures.

2. SCOPE

- 2.1 This procedure describes the process for requesting, preparing, approving, notifying, installing, and removing Caution Tags; and the periodic review of Caution Tags and the Caution Tag Log.
- 2.2 This procedure applies to situations in which site personnel need to be informed of special instructions required to maintain and operate equipment in a safe condition.
- 2.3 Caution Tags are not used if a potential for personal injury or equipment damage exists, or in place of more appropriate administrative controls, such as lockout/tagout, Work Control Tag, permanent posting, or an approved temporary procedure change.

3. DEFINITIONS

- 3.1 Caution Tag. A posting prescribing special cautionary measures for the operation of equipment. (See Appendix 1, Caution Tag.)

4. RESPONSIBILITIES

4.1 Operations Manager (OM)

- 4.1.1 Ensures the requirements of this procedure are implemented.
- 4.1.2 Approves all Caution Tags for buildings that do not have a Shift Manager (SM).
- 4.1.3 May designate Lockout/Tagout Manager as approval authority for Caution Tags.

4.2 Shift Manager

- 4.2.1 Notifies affected operations personnel of the issuance, location, and purpose of the Caution Tag.
- 4.2.2 Ensures corrective action is initiated to correct the situation requiring the Caution Tag.
- 4.2.3 Approves installation and removal of Caution Tags.
- 4.2.4 Ensures only trained personnel prepare, install, and remove Caution Tags.
- 4.2.5 Acts as the Lockout/Tagout Manager (LTM) when that position is not filled by another individual.

4.3 Lockout/Tagout Manager

- 4.3.1 Issues Caution Tag numbers and maintains Caution Tag Log. (See Appendix 2, Sample Caution Tag Log.)

4.3.2 Reviews Caution Tag Log and Caution Tags monthly.

4.4 Tag Preparer

4.4.1 Prepares, installs, and removes Caution Tags when directed by the SM.

4.5 Shift Personnel

4.5.1 Notify supervision of observed Caution Tag needs.

4.5.2 Notify supervision of any Caution Tags that are loose, unattached, or damaged.

5. INSTRUCTIONS

NOTE

An overview of the process for control of Caution Tags is shown in Appendix 3, Caution Tag Flowchart.

5.1 Caution Tag Guidelines

- 5.1.1 Shift personnel identifying the possible need for a Caution Tag use the following guidelines:

NOTE

Step 5.1.1.1 is not all inclusive, and is intended to be used as a guideline in determining when a Caution Tag may be inappropriate.

- 5.1.1.1 Caution Tags are not to be used if any of the following guidelines apply to the situation:
- (1) When a potential for personal injury exists
 - (2) When a potential for equipment damage exists
 - (3) When more appropriate administrative controls are required such as lockout/tagout, Work Control Tag, permanent posting, or approved temporary procedure change
 - (4) When special instructions may conflict with Operational Safety Requirements (OSRs); Department of Energy (DOE) Orders, federal, and industry standards; approved procedures; or vendor technical specifications
- 5.1.1.2 Caution Tags are used to inform shift personnel of special instructions required to maintain and operate equipment in a safe condition.

5.2 Caution Tag Requests

5.2.1 Requester notifies immediate supervisor when a need for a Caution Tag exists:

5.2.1.1 States specific reason why Caution Tag is required.

5.2.1.2 Gives device description and location.

5.2.2 Immediate supervisor notifies SM of need for a Caution Tag.

5.3 Caution Tag Preparation and Approval

5.3.1 SM initiates the necessary corrective action to correct the situation requiring the Caution Tag.

5.3.1.1 Documents corrective action in the SM log.

5.3.2 Designates a trained individual to prepare and install the Caution Tag.

NOTE

Caution Tag Log entries are normally completed by the Caution Tag preparer. The LTM maintains control of the Caution Tag Log.

- 5.3.3 Tag preparer records the device description, location, and special instructions in the space provided on the Caution Tag and Caution Tag Log:
 - 5.3.3.1 Ensures device description recorded on the Caution Tag and Caution Tag Log is the same as the device's unique identifying label.
 - 5.3.3.1.1 If the device does not have a unique identifying label, enters the functional name of the device on the Caution Tag and in the Caution Tag Log.
 - 5.3.3.2 Ensures device location recorded on the Caution Tag and Caution Tag Log includes all necessary information to provide a specific location such as:
 - (1) Building.
 - (2) Module.
 - (3) Column.
 - (4) Elevation.
 - (5) Closest major piece of equipment (if necessary).
 - 5.3.3.3 Ensures special instructions and specific reason(s) for the Caution Tag are recorded on the reverse side of the Caution Tag and Caution Tag Log.

5.3.4 The LTM reviews the completed Caution Tag and Caution Tag Log entries:

5.3.4.1 Ensures special instructions are complete, legible, and do not conflict with:

- (1) OSRs.
- (2) DOE Orders, federal, and industry standards.
- (3) Approved procedures.
- (4) Vendor technical specifications.

5.3.4.2 Ensures equipment description and location information are sufficiently complete and legible.

5.3.4.3 Resolves Caution Tag and Caution Tag Log entry deficiencies with Caution Tag preparer.

5.3.5 LTM issues a unique Caution Tag number:

5.3.5.1 Records Caution Tag number in the space provided on the Caution Tag and in the Caution Tag Log.

5.3.6 SM signs and dates the Approved By Block on the Caution Tag and Caution Tag Log.

5.4 Installation of Caution Tag

5.4.1 Tag preparer ensures device description recorded on the Caution Tag and Caution Tag Log is the same as the device's unique identifying label.

5.4.2 Securely affixes the approved Caution Tag, without obscuring the instruments, panels, or any posting, to the identified equipment or at a prominent location where it is visible to personnel in the area of concern.

5.4.3 Signs and dates Installed By Block on the Caution Tag.

5.4.3.1 Prints name above the signature block to ensure readability.

5.4.4 Notifies the SM or LTM when the Caution Tag has been installed.

5.5 Notification

5.5.1 The SM notifies affected shift personnel in accordance with 1-31000-COOP-013, Shift and Standing Orders that a Caution Tag has been issued.

5.5.1.1 Ensures purpose and location of the Caution Tag is included in notification.

5.6 Lost, Loose, Unattached, or Damaged Caution Tag

5.6.1 If a lost, loose, unattached, or damaged Caution Tag is identified:

5.6.1.1 The identifying person immediately notifies the cognizant supervisor.

5.6.1.2 Do not install loose or unattached tags.

5.6.2 The supervisor notifies the SM or LTM.

5.6.2.1 If the building does not have an SM, notifies the appropriate OM.

- 5.6.3 The SM or LTM clears the Caution Tag from the Caution Tag Log and, if appropriate, replaces with a new Caution Tag in accordance with this procedure.

5.7 Caution Tag Removal

- 5.7.1 The LTM determines the action required to disposition any Caution Tag.
- 5.7.2 SM or LTM authorizes removing any Caution Tag that is no longer required. If LTM authorizes removal, the LTM informs SM or OM of any Caution Tag that will be removed.
- 5.7.3 Signs the Approved By Block and enters the date in the Caution Tag Log.
- 5.7.4 The SM designates a trained individual to remove the Caution Tag.
- 5.7.5 The trained individual removing the Caution Tag:
- 5.7.5.1 Removes the Caution Tag, and returns it to the LTM.
- 5.7.5.2 Signs and dates in the Removed By Block of the Caution Tag Log.
- 5.7.6 The LTM verifies the correct Caution Tag was removed and destroys the Caution Tag.

5.8 Review of Tags and Logs

5.8.1 The LTM reviews Caution Tag Log and Caution Tag monthly:

- (1) All administrative Caution Tag Log and Caution Tag requirements are met
- (2) All spaces on Caution Tag Log and Caution Tags are correctly completed
- (3) All required signatures are in place
- (4) All active Caution Tags are properly installed
- (5) All Caution Tags cleared since the last review are removed
- (6) An area tour is conducted to check for unauthorized, superseded, and undocumented Caution Tags

5.8.2 The SM or LTM ensures deficiencies identified by the review are logged and corrected.

5.8.3 Documents the review by entering the following in the Caution Tag Log on the line below the last Caution Tag before the review:

Review performed by: (Signature) and Date

6. RECORDS

6.1 The LTM maintains the Caution Tag Log in the back of the Lockout/Tagout Log in a separate section.

6.1.1 If the Caution Tag Log is maintained in a separate log, keeps it in close proximity to the Lockout/Tagout Log.

6.2 Ensures that completed Caution Tag Log sheets are retained in accordance with the RFP Records Management Manual and the RFP Quality Assurance Manual.

- 6.3 The SM maintains a current list of trained individuals authorized to prepare, install, and remove Caution Tags for the assigned area, and keeps list available at work station.

7. REFERENCES

- 7.1 DOE Order 5480.19, Conduct of Operations Requirements for DOE Facilities
- 7.2 Occupational Safety and Health Act, 29 CFR 1910.145, Specifications for Accident Prevention Signs and Tags
- 7.3 RFP Quality Assurance Manual
- 7.4 RFP Records Management Manual
- 7.5 1-31000-COOP-013, Shift and Standing Orders

APPENDIX 1
Page 1 of 1

CAUTION TAG

Caution Tags have the following content and format
using black letters on a yellow background.

○

Tag No. _____

CAUTION

DO NOT OPERATE THIS
EQUIPMENT UNTIL
SPECIAL
INSTRUCTIONS ON
REVERSE SIDE ARE
THOROUGHLY
UNDERSTOOD

DEVICE DESCRIPTION / LOCATION:

Approved By _____ Date _____
Installed By _____ Date _____

DO NOT REMOVE THIS TAG

○

CAUTION

DO NOT OPERATE THIS
EQUIPMENT UNTIL SPECIAL
INSTRUCTIONS BELOW ARE
THOROUGHLY UNDERSTOOD

SEE OTHER SIDE

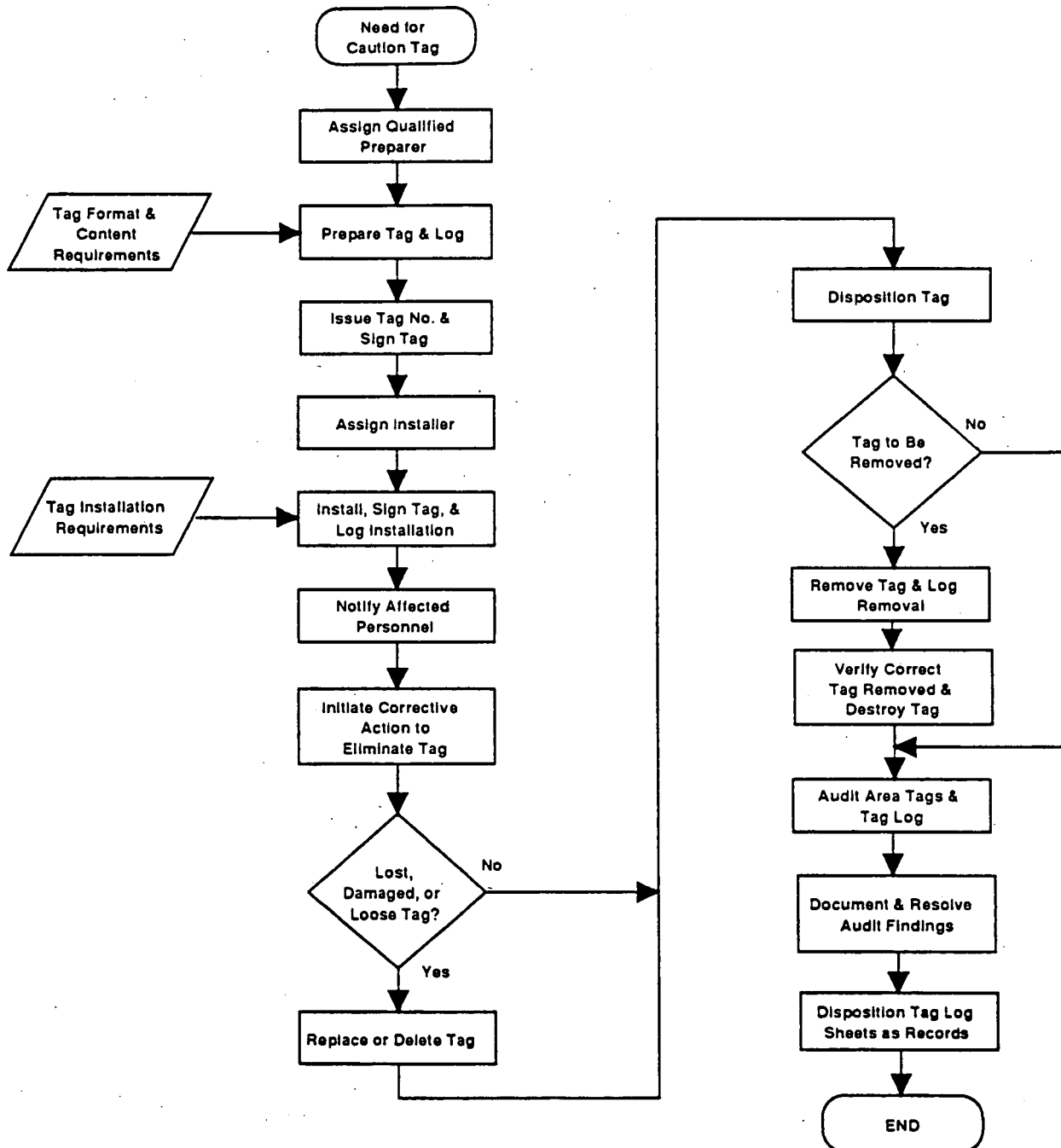
SAMPLE CAUTION TAG LOG

CAUTION TAG LOG

[illegible]

APPENDIX 3
Page 1 of 1

CAUTION TAG FLOWCHART



Rocky Flats Plant

COOP-09

CONTROL OF INFORMATION TAGS

PREPARED BY: _____

Date

APPROVED BY: _____

General Manager
EG&G, Rocky Flats

Date

Effective Date: _____

9/2/91

CONCURRENCE:

J. M. Pizzuto

8/1/91

Assistant General Manager
Engineering

Date

Assistant General Manager
Plutonium Recovery

8/1/91

Date

Assistant General Manager
Non-Plutonium Operations

Date

Assistant General Manager
Program & Project Management

8/1/91

Date

Assistant General Manager
Performance Assurance

Date

Assistant General Manager
Plutonium Production

8/1/91

Date

Assistant General Manager
Performance-Based Training

Date

Assistant General Manager
Technical Support

8/1/91

Date

Assistant General Manager
Quality Assurance

Date

Associate General Manager
Environmental Restoration &
Waste Management

8/1/91

Date

Operations Review Committee Chairman

Date

Associate General Manager
Health and Safety

Date

This document is the responsibility of the Assistant General Manager, Plutonium Production.

Reviewed for Classification

By _____

Date _____

CONTROLLED COPY

Rocky Flats Plant 1-31000-COOP-010

REVISION 0

CONTROL OF OPERATOR AIDS

APPROVED BY: *[Signature]* 10/9/92
General Manager, Rocky Flats Plant Date

Responsible Organization: Plutonium Production

Effective Date: October 27, 1992

CONCURRENCE:

/s/ G. E. Marx 9/3/92
Associate General Manager, Administration and Planning Date

/s/ H. S. Berman 9/17/92
Associate General Manager, Engineering Date

/s/ J. M. Kersh 9/7/92
Associate General Manager, Environmental Restoration Management Date

/s/ J. M. Kersh 9/7/92
Associate General Manager, Environmental and Waste Management Date

/s/ E. H. Ideker 9/2/92
Associate General Manager, Facility Management and Operations Date

/s/ D. W. Ferrera 9/10/92
Associate General Manager, Maintenance and Plant Support Date

/s/ L. C. Smith for J. G. Davis 9/8/92
Associate General Manager, Performance and Quality Assurance Date

/s/ J. H. Riley 9/18/92
Associate General Manager, Plant Safety and Security Date

[Signature] 10/06/92
Site Operations Review Committee Chairman Date

[Signature] 9/1/92
Subject Matter Expert Date

CONTROLLED COPY

AFFECTS PLANT SAFETY
PROCEDURE USE CATEGORY 3

following PRRs have been incorporated in this revision:
92-PRR-000592

This procedure supersedes procedure COOP-010, Revision 1.

Reviewed for Classification

By *[Signature]*

Date 10-6-92

PADC-92-00448

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
TITLE	1
TABLE OF CONTENTS	2
1. PURPOSE	3
2. SCOPE	3
3. DEFINITIONS	3
4. RESPONSIBILITIES	4
4.1 Operations Manager (OM)	4
4.2 Any Employee	4
5. INSTRUCTIONS	5
5.1 General Requirements	5
5.2 Development, Installation, and Control	5
5.3 Periodic Review	7
6. RECORDS	8
7. REFERENCES	8
<u>Appendices</u>	
Appendix 1, Sample Information Tag	9
Appendix 2, Operator Aids Flow Chart	10
Appendix 3, Sample Operator Aid Postings Log	11
Appendix 4, Sample Operator Aids Review Sheet	12

1. PURPOSE

- 1.1 This procedure defines the process for controlling operator aid postings and information tags needed for the safe operation of Rocky Flats Plant (RFP).
- 1.2 This procedure provides instructions for identifying, approving and using operator aid postings and information tags (postings) at RFP.

2. SCOPE

- 2.1 Postings apply to all operations and support personnel.
- 2.2 Postings within the scope of this procedure do not supersede or conflict with approved procedures or policies.
- 2.3 Postings are not used for warnings or cautions regarding personnel or equipment safety or in place of more appropriate administrative controls, such as lockout/tagout, work control forms, Nuclear Material Safety Limits, Criticality Safety Operating Limits, or accident prevention signs.

3. DEFINITIONS

- 3.1 **Information Tag.** A temporary posting of not more than 90 calendar days containing general information, not of a safety nature, to assist operating personnel in the performance of their duties until a formal posting is issued or the information is no longer needed. (See Appendix 1, Sample Information Tag).
- 3.2 **Operator Aid Postings.** Information posted to assist operations and support personnel in performing their duties. Forms in which this information may be posted include copies of approved procedures (pages or portions thereof), system drawings, graphs, and curves.

4. RESPONSIBILITIES

4.1 Operations Manager (OM)

4.1.1 Ensures all postings needed for safe operations in the assigned facility:

- (1) Are identified and posted at appropriate locations.
- (2) Reflect the most current and accurate information available.
- (3) Do not supersede or conflict with any other approved procedure or policy.

4.1.2 Maintains a log of all postings approved and issued for use in the assigned facility.

4.1.3 Performs monthly reviews to ensure that postings in use at the facility are current and accurate.

4.1.4 Approves postings.

4.1.5 Maintains control of information tags.

4.2 Any Employee

4.2.1 Develops and proposes needed postings.

4.2.2 When directed, installs postings that are approved by OM.

5. INSTRUCTIONS

NOTE

An overview of the process for control of operator aids is shown in Appendix 2, Operator Aids Flow Chart.

5.1 General Requirements

- 5.1.1 Authorized shift personnel install postings close to the area of their intended use, and ensure postings are visible to personnel entering the area.
- 5.1.2 Install postings so they:
 - (1) Do not obstruct instruments, panels, or other posted material.
 - (2) Are securely fastened to the wall, door, or equipment as applicable for the required sign.
- 5.1.3 Do not use informal paper signs, yellow tape, or other nonstandard materials for postings.

5.2 Development, Installation, and Control

- 5.2.1 Except as approved by the OM in accordance with this subsection, operator aid postings:
 - (1) Are prepared on 8.5 x 11 inch white paper.
 - (2) Should be protected, when possible, by lamination or a clear plastic cover.
- 5.2.2 Any employee may develop and propose to the OM for evaluation a posting for an assigned work area.

- 5.2.3 OM reviews the posting:
 - 5.2.3.1 Evaluates need for the posting.
 - 5.2.3.2 Verifies accuracy of the proposed information.

NOTE

A metal sign, system drawing, or information tag are examples of other materials that may be used as operator aid posting.

- 5.2.3.3 Determines adequacy of material used, if the proposed operator aid posting is not prepared on 8.5 x 11 inch white paper.
- 5.2.3.4 Verifies posting will not alter, supersede, or conflict with approved procedures or policies.
- 5.2.4 If posting is not approved, OM informs individual of rejection of proposed operator aid.
- 5.2.5 If posting is approved, OM processes posting:
 - 5.2.5.1 Enters sequential log number; posting content, location, and references; approval signature and date on the Operator Aid Postings Log. (See Appendix 3, Sample Operator Aid Postings Log.)
 - 5.2.5.2 Enters approval signature and date on posting.
 - 5.2.5.3 If posting is an information tag, ensures the number on the information tag is identical to the log number.
 - 5.2.5.4 Attaches a copy of the posting with the log sheet.

- 5.2.5.5 Determines location for the posting.
- 5.2.5.6 Ensures posting is properly installed.
- 5.2.6 If a change to a posting reference document occurs, OM ensures affected postings are modified.
- 5.2.7 OM processes canceled postings:
 - 5.2.7.1 Reviews posting and verifies no further need exists.
 - 5.2.7.2 Ensures canceled posting is removed.
 - 5.2.7.3 Updates the Operator Aid Postings Log:
 - 5.2.7.3.1 Enters the word Canceled in right-hand margin next to listing.
 - 5.2.7.3.2 Draws a single line through listing.
 - 5.2.7.3.3 Initials and dates cancellation.
 - 5.2.7.3.4 Removes the copy of posting attached to log sheet.

5.3 Periodic Review

- 5.3.1 OM performs a monthly review of each area or when new or revised reference documents are made effective.
 - 5.3.1.1 The review ensures:
 - (1) All postings are applicable, correct, and current.
 - (2) Operator Aid Postings Logs for the area accurately reflect the postings in use.

- 5.3.1.2 If deficiencies are discovered, takes appropriate corrective action.
- 5.3.1.3 Documents the results of the review on a review sheet maintained in the Operator Aid Postings Log. (See Appendix 4, Sample Operator Aids Review Sheet.)

6. RECORDS

- 6.1 OM maintains one or more Operator Aid Postings Logs for all areas in the assigned facility.
- 6.2 Retains each Operator Aid Postings Log sheet as long as the sheet contains active postings.
- 6.3 Processes completed Operator Aid Posting Logs and Operator Aids Review Sheets in accordance with the RFP Records Management Manual and the RFP Quality Assurance Manual.
- 6.4 Records generated as a result of this procedure are maintained in accordance with the Records Management Manual and 1-48000-QAR-001, Quality Assurance Records.

7. REFERENCES

- 7.1 Department of Energy (DOE) Order 5480.19, Conduct of Operations Requirements for DOE Facilities (07/09/90)
- 7.2 RFP Records Management Manual
- 7.3 RFP Quality Assurance Manual
- 7.4 1-48000-QAR-001, Quality Assurance Records

APPENDIX 1

Page 1 of 1

SAMPLE INFORMATION TAG

Information tags have the following content and format using blue letters on a white background.

○

TAG NO. _____

INFORMATION

DEVICE DESCRIPTION / LOCATION:

INFORMATION:

Approved By _____ Date _____

Installed By _____ Date _____

DO NOT REMOVE THIS TAG

○

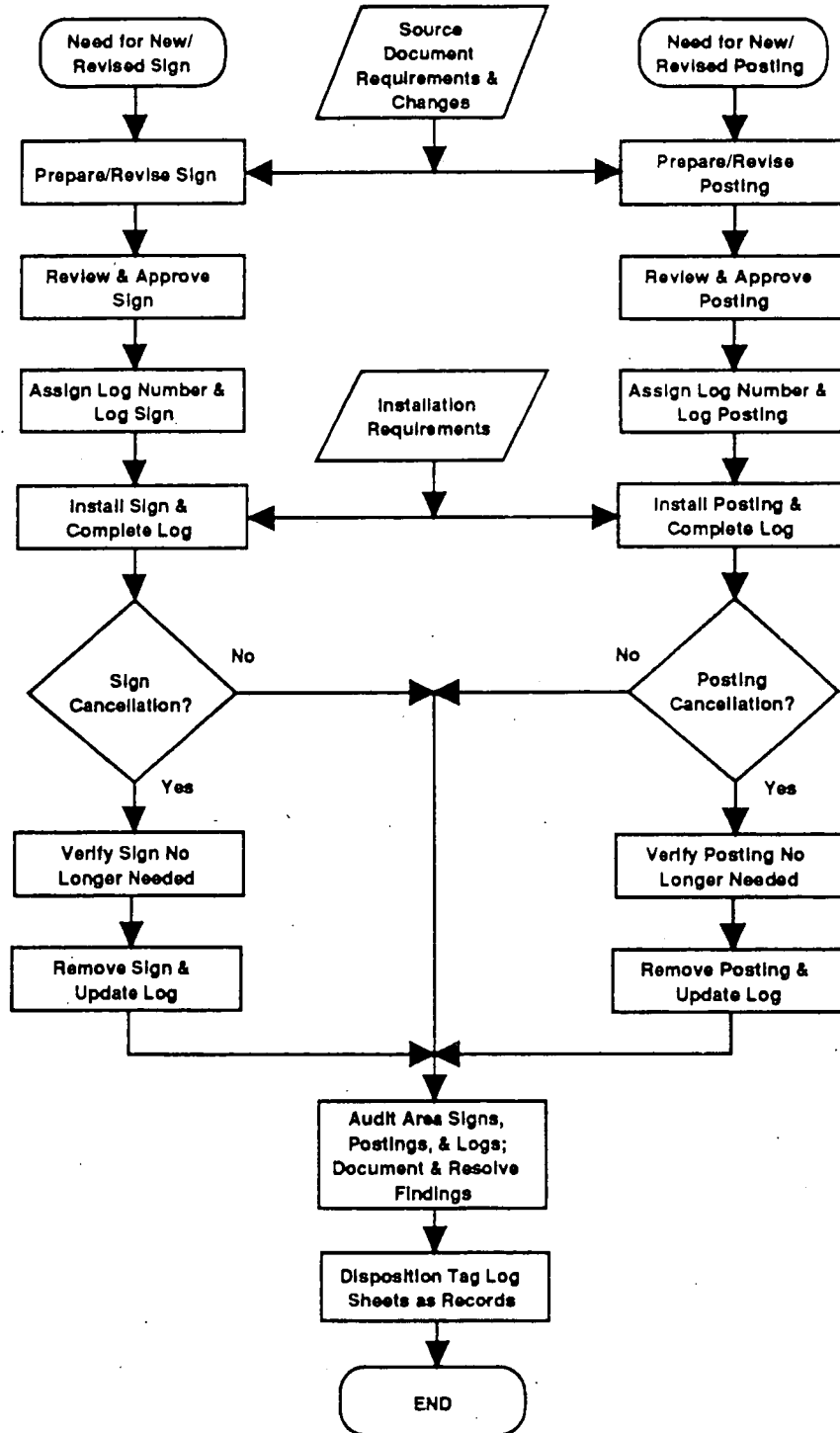
INFORMATION

SEE OTHER SIDE

DO NOT REMOVE THIS TAG

APPENDIX 2
Page 1 of 1

OPERATOR AIDS FLOW CHART



Page 1 of 1

[illegible]

Page 1 of 1

[illegible]

Document Modification Request

Print or Type all information (except signatures). Process procedures in accordance with 1-A01-PROC DEV-400, Procedure Process.

25. DMR No.
96-DMR-0007651. Name/Phone/Pager/Location
G. M. Miller/5789/3237/B-4412. Date
08/20/963. Existing Document Number and Revision
1-31000-COOP-0114. Document Type: ☒ Procedure ☐ Plan
☒ Other Manual5. Document Title
Conduct of Operations Manual [Pre-Evolution Briefing]

6. Item	7. Page	8. Step	9. Proposed Modification
1	4	3.2	Rewrite as follows: <u>Evolution Supervisor</u> . Individual who serves as the job lead for an evolution; who provides direct oversight of the evolution; identifies the scope of and prepares and conducts the PEB; and submits the PEB Record to the Operations Manager (OM). This person is often the person who originates and proposes the evolution, and is usually the supervisor of Operations and support personnel conducting the evolution."
2	5	4.2	"Ensures that all personnel from multiple disciplines or multiple companies participating in the evolution attend the same PEB." Insert as new step 4.2.2.3
3	5	4.2	"Serves as the job lead, directly overseeing the execution of the job and ensuring the coordination of personnel as planned in the PEB." Insert as new step 4.2.6
10. Item	10a. Justification (reason for modification, EJO's, TP's, etc.)		
1-3	These changes are necessary to establish the evolution supervisor as the job lead, to ensure PEB's required that Radiological Control elements are adequately addressed, and to ensure that all involved individuals attend PEB's. These changes support corrective action for root cause analysis CA-96-005.		

11. ☒ Process☐ Do not Process (state reason in Block 10a)

D. B. Branch/

DBB 8/27/96

12. ☒ Process (Complete Blocks 13-22)☐ Do not Process (state reason in Block 10a)

D. B. Branch/

DBB 8/27/96

13. New Document/Rev. No. (If new or changed)
N/A

Complete either Section 14a. or 14b., as applicable. For procedures, attach completed Procedure Modification Worksheet from 1-A01-PROC DEV-400.

14a. Type of Complete Modification

☐ Revision
☐ One-Time-Use
☐ Cancellation

14b. Changes: (check all that apply.)

☐ Intent Change
☒ Nonintent Change
☒ Regular
☐ Editorial Correction
☐ Interim Approval Requested - Needed for Immediate Use (14-day limit for obtaining final approval)

Additional Attributes:

☐ Temporary
☐ One-Time-Use
☐ Limited Distribution15. ERM Change Control Board Required: ☐ Yes ☐ No (Applicable only to new procedures, revisions, and intent changes.)

List the reviewing disciplines in Block 16. After concurrence has been obtained (in accordance with 1-A01-PROC DEV-400), enter the name of the reviewer followed by / in block 17. If the reviewer indicates No comments, the review signature constitutes concurrence. Enter the date concurrence is obtained in Block 18.

16. Organization	17. Reviewer/Concurrence	18. Date	16a. Organization	17a. Reviewer/Concurrence	18a. Date
SME	D. B. Branch / DBB	8/27/96			
RCPI	J. T. Gilmarin / J.T. Gilmarin	8/26/96			

19. Assigned SME/Phone/Pager/Location
D. B. Branch/4833/4691/B-44120. Cost Center
309921. Change Number
9524997B22. Requested Completion Date
9-10-9623. Prescreen/Screen/1800 Number
N/A24. Independent Safety Review Meeting and Date
Not Required

25. After obtaining ALL required signatures: Responsible Manager's Approval (print/sign/date) (Not required for New Procedures or Revisions)

R. G. Card/

President and Chief Executive Officer

27. Effective Date
9-15-96

28. Expiration Date (if applicable)

PADC-92-00449

CONTROLLED COPY

REVIEWED FOR CLASSIFICATION/UONI

By R. A. Monahan / u/o

Date 8-28-96

DMR (continuation sheet)

Page 2 of 2

Print or Type all information (except signatures). Process procedures in accordance with 1-A01-PROC DEV-400, Procedure Process.

25. DMR No.
96-DMR-000765

3. Document Number/Revision
1-31000-COOP-011

5. Document Title
Conduct of Operations Manual [Pre-Evolution Briefing]

6. Item	7. Page	8. Step	9. Proposed Modifications
4	6	4.4.2	<i>change step forward:</i> "Attend all PEBs for work in which they will participate as scheduled in the POD."
5	6	4.4	"In the event that multiple disciplines or multiple companies are to participate in an evolution, all participants must take part in the same PEB." <i>Insert as new step 4.4.3.2.</i>
6	8	5.3.6	"Radiological concerns and Radiological Control elements." <i>Insert as new step 5.3.6 (6)</i>
7	8	5.3.6.1	After, "...not required to attend the PEB." add, "RCTs providing support must attend the PEB or be given a special briefing on the task, the hazards and Radiological Control elements when they arrive to provide support."
8	9	5.3.7	Insert, "(15) Radiological concerns and Radiological Control elements of the task."
9	9	5.3.7	Change subparagraphs (15) and (16) to (16) and (17) respectively.

10. Item	10a. Justification (Reason for Modification)
4-9	These changes are necessary to establish the evolution supervisor as the job lead, to ensure PEB's required that Radiological Control elements are adequately addressed, and to ensure that all involved individuals attend PEB's. These changes support corrective action for root cause analysis CA-96-005.

26. After obtaining ALL required signatures: Responsible Manager's Approval (print/sign/date) (Not required for New procedures and Revisions)
R. G. Card, President and Chief Executive Officer

1. Date 2/6/95	25. DMR No. 95-DMR-000302
-------------------	------------------------------

2. Existing Document Number/Revision 1-31000-COOP-011	3. New Document Number or Document Number if it is to be changed with this Revision N/A
Originator's Name/Phone/Fax/Location 1. L. Johnson/8081/D1046/T893A	5. Document Title PRE-EVOLUTION BRIEFINGS

6. Document Type ☒ Procedure
☐ Other _____

7. Document Modification Type (Check only one)
☐ New ☐ Revision ☒ Intent Change ☐ Nonintent Change ☐ Editorial Correction ☐ Cancellation

8. Item	9. Page	10. Step	11. Proposed Modifications
N/A	N/A	N/A	Update LOEP to reflect DMR.
1	5	4.1.3	Add new step 'For radiological work, conduct a PEB prior to performing work which requires entry into a High Contamination Area, entry into an Airborne Radioactivity Area, or work which is anticipated to exceed the trigger levels identified in the ALARA Program Plan.'
2	5	4.2.4	Add new step 'Documents attendance and a summary of topics discussed on the PEB record.' and renumber old step 4.2.4 to 4.2.5.
3	5	4.2.5.1	Add new step 'For radiological work, forward a copy of the PEB record to the OM and maintain the original documentation with the technical work document (i.e., procedure, work package, etc.).'
4	9	5.3.7(9)	Add 'operability checks and' before 'an understanding' to line 5.3.7(9),
5	10	5.4	Add 'For non-radiological work' to front of step.

12. Justification (Reason for Modification, EJO #, TP #, etc.)

Make modifications required to incorporate radiological requirements of the DOE Radiological Control Manual, Doe/EH-0520-F, and 10CFR, Part 835.

24-0296T, SIZE RCM

22.12.65

The above 5 items are correct. ^{10/10/19}
 Items 1, 2, 4, 5, 6 are a result of determining that after the 1990s, the
 non-ferrous metal and steel should go to the non-ferrous metal.

If modification is for a new procedure or a revision, list concerning disciplines in Block 13, and enter N/A in Blocks 14 and 15. If modification is for any type of change or a cancellation, organizations are listed in Block 13, then Concurrency prints, and signs in Block 14, and dates in Block 15.

13. Organization	14. Print, Sign (if applicable)	15. Date (if applicable)
RC SFW	IS/ W.D. Scheuermann	3/21/95
BLM WAZ	IS/ V.M. Pizzuto	4/11/95
BLM ZST	IS/ S.G. Stiger	3/21/95
BLM MONGOOSE	IS/ Robert M. Leonard for L. Voorheis	2/11/95
WS. MANG.	IS/ D.V. Thomas for T. G. Hedahl	2/11/95
WS. SITS	IS/ K.P. Ferrara for K.E. Fray	3/21/95
CPG BAC	FE JLL	3/2/95

15. Originator's Supervisor (print/sign/date) W. G. Zurlione W. G. Zurlione 2/22/95					
17. Assigned SME (Phone/Pager/Location) C. G. Libias: 8231/D5507/T893A 3/2/95		18. Cost Center 0483	19. Charge Number 824063-24	20. Requested Completion Date 8-1-95	21. Effective Date 8-1-95
Accelerated Review? Yes <input type="checkbox"/> No <input type="checkbox"/>		23. ORC Review J. A. Strickland #S0RC-95-024 7-17-95			
24. Responding Manager (print/sign/date) C. A. G. 7/21/95					

REVIEWED FOR CLASSIFICATION: USNI

7259

PADC-92-00449

DMR (continuation sheet)

Page 2 of 2

Refer to 1-A01-PPG-001 for Processing Instructions.
Print or Type All Information (Except Signatures).

25. DMR No. 95-DMR-000302

2. or 3. Document Number/Revision

1-31000-COOP-011, REV.0

5. Document Title

PRE-EVOLUTION BRIEFINGS

9. Page		10. Step	11. Proposed Modifications
6	10	5.5&6	Add new step 5.5: For radiological work, forward a copy of the PEB record to the OM or designee and maintain the original document with the technical work document (i.e. procedures, work package, etc.) also renumber old step 5.5 to 5.6. <i>12/73</i>
7	12	7	Change 'assignments' to 'scope of work to be performed'.
8	13	10	Add ', are verified operable and periodic operability checks are discussed' to end of step.
9	13	11	Add 'and verified operable ' to end of step.
10	N/A	N/A	Add 4 new radiological checkoff steps and an area to document a summary of topics discussed (if not adequately documented previously) to Appendix 1, rearrange steps so old steps 26-28 remain at end of list, and update appendix numbering and page numbers accordingly.

12. Justification (Reason for Modification)

Refer to 1-A01-PPG-001 for Processing Instructions.
Print or Type All Information (Except Signatures).

1. Date
12-6-94

25.
DMR No. 94-DMR-002275

2. Existing Document Number/Revision
1-31000-COOP-011

3. New Document Number or Document Number if it is to be changed with this Revision
N/A

4. Originator's Name/Phone/Page/Location
B. M. Clausen 7781/ T452A

5. Document Title
PRE-EVOLUTION BRIEFINGS

Document Type ☒ Procedure
☐ Other

7. Document Modification Type (Check only one)

☐ New ☐ Revision ☐ Intent Change ☒ Nonintent Change ☐ Editorial Correction ☐ Cancellation

8. Item 9. Page 10. Step

11. Proposed Modifications

N/A	N/A	N/A	Update LOEP to reflect DMR.
N/A	N/A	N/A	Add section to explain scope of newly added Appendix 4, Hazardous Material Release Prevention/Preparedness Management Assessment Checklist.
N/A	N/A	N/A	Add step to have the Evolution Coordinator and Shift Manager coordinate to complete the new Appendix 4, Hazardous Material Release Prevention/Preparedness Management Assessment Checklist.
N/A	N/A	N/A	Add step to have the Evolution Coordinator review the items on the completed Appendix 4 during PEB
N/A	N/A	N/A	Add checkoff to review the completed Appendix 4 on Appendix 1, Pre-evolution Briefing Record
N/A	N/A	N/A	Add new Appendix 4, Hazardous Material Release Prevention/Preparedness Management Assessment Checklist.

12. Justification (Reason for Modification, EJO #, TP #, etc.)

To meet the requirements of task 1A of the Spill Management Action Plan CM-94-007980 which requires that the directions on the operations order: Hazardous Material Release Prevention/Preparedness Management be incorporated into 1-31000-COOP-011.

If modification is for a new procedure or a revision, list concurring disciplines in Block 13, and enter N/A in Blocks 14 and 15. If modification is for any type of change or a cancellation, organizations are listed in Block 13, then Concuror prints, and signs in Block 14, and dates in Block 15.

13. Organization	14. Print, Sign (if applicable)	15. Date (if applicable)
ENV. REST.	SI S. G. Staer	1/25/95
ANAL. SERV.	SI W. D. Scheuerman	1/4/95
ELD. DEACT.	SI V. M. Pizzuto	1/4/95
ENV. MGT. SYS.	SI Robert C. Leonard for G. M. Voorheis	12/20/94
SUPPORT SERV.	SI Mark E. Anderson	1/11/95
WASTE HMT	SI P. V. Thomas	12/15/94
WASTE SERV.	SI K. P. Ferrera for R. E. Fray	
OE	SI C. B. Jones for M. M. McDonald	1/25/94

16. Originator's Supervisor (print/sign/date)

J. T. Gilman 12/8/94

17. Assigned SME/Phone/Page/Location

B. M. Clausen 7781/ T452A

18. Cost Center

0624

19. Charge Number

903079-00

20. Requested Completion Date

21. Effective Date

2/1/95

Accelerated Review?
Yes ☒ No ☐

23. ORC Review

ORC Review not required

24. Responsible Manager (print/sign/date)

M. M. McDonald 12/8/94

REVIEWED FOR CLASSIFICATION / UCNI

BY [Signature]
DATE 12-8-94 [Signature]

PADC-92-00449

PAGE 1 of 1

1. Date 9/14/94	25. DMR No. 94-DMR-002059
--------------------	------------------------------

1. TO ENSURE THAT ALL PERSONNEL ARE AWARE OF NEW EGRESS PROCEDURES AND SPECIFIC EGRESS AREAS FOR JOB BEING BRIEFED.
2. TO COMPLY WITH PPH REQUIREMENTS.

[illegible]

16. Originator Supervisor (print/sign/date) GEORGE M. MILLER <i>mmiller</i> 9/14/94				
17. Assigned SME: Phone/Pager/Location GEORGE M. MILLER		18. Cost Center 0492	19. Charge Number 903000	20. Requested Completion Date 11/10/94
21. Effective Date 11/10/94				
22. Accelerated Review? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		23. ORC Review ORC REVIEW NOT REQ'D -		
24. Responsible Manager (print/sign/date) DB Branch TBB 10/25/94				

REVIEWED FOR CLASSIFICATION / UCNI
BY Mary K. Foy (11/11/94)
DATE 11/11/94

CONTROLLED COPY

PAGE 1 of 1

1. Date 7-12-94	2. DMR No. 94-DMR-001324
--------------------	-----------------------------

REVIEWED FOR CLASSIFICATION / UCNI
BY Mary K. Fane 11/11/11
DATE 5/2/90

PAGE 1 of 1

1. Date 6/14/94	25. DMR No. 94-DMR-001167
--------------------	------------------------------

REVIEWED FOR DECLASSIFICATION / UCN#
BY SP/SA [signature] UCN#
DATE 6-17-99

DOCUMENT MODIFICATION REQUEST (DMR)

PAGE 1 OF ____

Refer to 1-A01-PPG-001 for Processing Instructions.
Print or Type All Information (Except Signatures).

1. Date

4/28/94

25.

DMR. No. 94-DMR-GCC862

2. Document Number/Revision 1-31000-COOP-011, Revision 0			3. New Document Number or Document Number if it is to be changed with this Revision		
4. Originator's Name/Phone/Page/Location M. A. Plankinton/X8399/D1433/B564			5. Document Title Conduct of Operations		
6. Document Type <input type="checkbox"/> Procedure <input checked="" type="checkbox"/> Other <u>Manual</u>			7. Document Modification (Check only one) <input type="checkbox"/> New <input type="checkbox"/> Revision <input checked="" type="checkbox"/> Intent Change <input type="checkbox"/> Nonintent Change <input type="checkbox"/> Editorial Correction <input type="checkbox"/> Cancellation		
8. Item	9. Page	10. Step	11. Proposed Modifications		
1.	9.	14.	Insert new step 14: Bring the specific determination data for (14) Agency of applicable pages of the Waste Stream and Residue. Identification and Characterization (WSRIC) manual or other waste and a discussion of waste generation and disposal activities. The discussion will include the following: <ul style="list-style-type: none"> - Type of waste to be generated - Verification of waste generator training - Location of disposal area - Proper Waste/Residue Traveler instructions - Ensuring verifier is available 		
2.	9.	15.	Renumber step 14 to 15:		
3.	13.	26.	(15) Other relevant topics		
4.	13.	27.	Insert new step 26: 26. All applicable pages from the WSRIC have been discussed and available.		
5.	13.	27.	Renumber step 26 to step 27:		
			27. A final summary of the evolution was performed.		
			Renumber step 27 to step 28:		
			28. All questions have been adequately answered.		

12. Justification (Reason for Modification, EJO #, TP #, etc.)

To ensure personnel are knowledgeable of the WSRIC, what goes on the Drum Traveler, and what type of waste is going to be generated per individual job.

If modification is for a new procedure or a revision, list concurring disciplines in Block 13, and enter N/A in Blocks 14 and 15. If modification is for any type of change or a cancellation, organizations are listed in Block 13, then Concuror prints, signs in Block 14, and dates in Block 15.

13. Organization	14. Print, Sign (if applicable)	15. Date (if applicable)
REF	ISI J. H. Breen	5/3/94
EEDM	ISI M. M. McDonald	5/5/94
ERM	ISI S. G. Stiger	5/18/94
EWM	ISI T. G. Heidehl	5/13/94
EMCO	ISI W. A. Kirby	3/4/94
WEDS	ISI D. W. Ferrer	3/4/94
CEFA	ISI L. C. Smith for J. G. Davis	5/12/94
SSES	ISI R. E. Kell	5/5/94
FM	ISI G. E. Francis	5/3/94
BT	ISI A. W. Kuester	5/11/94

16. Originator's Supervisor (print/sign/date)

R. J. Walker

R. J. Walker 4/29/94

17. Assigned SME/Phone/Page/Location

M. A. Plankinton

18. Cost Center

0210

19. Charge Number

90302600

20. Requested Completion Date

4-28-94

21. Effective Date

6/3/94

22. Accelerated Review?

Yes ☒ No ☐

23. SRC Review

SRC Review not required

24. Approver (print, sign, date)

R. J. Walker 5/26/94

REVIEWED FOR CLASSIFICATION/UCII

BY: J. H. Conner 5/24/94

DATE: 5/24/94

PADC-92-00449

CONTROLLED COPY

PROCEDURE CHANGE NOTICE (PCN)

Refer to 1-11000-PAPG-001 or 1-11000-PAPG-002 for instructions.
 PRINT or TYPE all information (except signatures).

Page 1 of 1
 PCN No. 93-PCN-000287

1. Originator/Phone No./Location <i>Bob Dikeman / 3562 / 559</i>		2. Date <i>2-18-93</i>	3. Cost Center <i>0210</i>
4. Procedure Number/Revision Level <i>1-31000-EXP-011 / 0</i>		5. Procedure Title <i>Pre-Evolution Briefing</i>	
6. Procedure Change Type <input checked="" type="checkbox"/> Major <input type="checkbox"/> Minor		7. Duration <input checked="" type="checkbox"/> Permanent <input type="checkbox"/> Temporary	8. Charge Number <i>99025000</i>
9. Page	Step or Section	Proposed Changes	
9	5.3.7 (13)	ADD statement to number (18): <u>VERIFIES</u> ALL <u>REQUIRED</u> PERSONNEL ARE WASTE GENERATOR QUALIFIED.	
13	18	ADD TO (18) on check off sheet: ALL <u>Required</u> personnel are Waste Generator Qualified.	

(Use RF-47636A, PCN CONTINUATION SHEET, for additional space)

10. Justification (Reason for Change)

-Ensure proper attention to waste generating situations.
 See attached Internal Surveillance NO. IS 559-0215

11. Supervisor (signature/date) <i>[Signature]</i> 2-18-93		12. Affects Plant Safety? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	13. Procedure Use Category <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3
14. Concurrence Organization	Signature	Date	14. Concurrence Organization
AIP	/s/ G. E. MARX	3/8/93	FM:O
EIT	/s/ H. S. BERMAN	6/7/93	MIPS
ERM	/s/ R. L. BENEDETTI	3/16/93	SA: A
E:WM	/s/ T. HEDAHL	3/29/93	SS: S
			ORC
			<i>Atty # 559-93-51</i>
			<i>Concur 559 ORC per ADM 2.91</i>
			<i>Section 3.12 - App 2</i>
15. Responsible Line Organization Manager (signature/date) <i>[Signature]</i> 6/11/93		16. Effective Date <i>9/17/93</i>	

F-47636 (Rev. 10/91)

REVIEWED FOR CLASSIFICATION

BY *[Signature]*

DATE *2/25/93*

PADC-92-00449

CONTROLLED COPY

Rocky Flats Plant 1-31000-COOP-011

REVISION 0

PRE-EVOLUTION BRIEFING

APPROVED BY: *[Signature]* 10/9/92 Responsible Organization: Plutonium Production
General Manager, Date
Rocky Flats Plant

Effective Date: October 27, 1992

CONCURRENCE:

/s/ G. E. Marx 9/3/92
Associate General Manager, Date
Administration and Planning

/s/ C. E. Beutler for H. Berman 9/8/92
Associate General Manager, Date
Engineering

/s/ J. M. Kersh 9/7/92
Associate General Manager, Date
Environmental Restoration Management

/s/ J. M. Kersh 9/7/92
Associate General Manager, Date
Environmental and Waste Management

/s/ E. H. Ideker 9/2/92
Associate General Manager, Date
Facility Management and Operations

/s/ D. W. Ferrera 9/10/92
Associate General Manager, Date
Maintenance and Plant Support

/s/ L. C. Smith for J. G. Davis 9/8/92
Associate General Manager, Date
Performance and Quality Assurance

/s/ J. H. Riley 9/18/92
Associate General Manager, Date
Plant Safety and Security

[Signature] 10/06/92
Site Operations Review Committee Chairman Date

[Signature] 9/1/92
Subject Matter Expert Date

AFFECTS PLANT SAFETY
PROCEDURE USE CATEGORY 3

CONTROLLED COPY

The following PRRs have been incorporated in this revision:
92-PRR-000228

This procedure supersedes procedure COOP-011, Revision 1.

PADC-92-00449

Reviewed for Classification

By *[Signature]* - UNCL

Date 10-6-92

(09/15/96)

LIST OF EFFECTIVE PAGES

<u>Pages</u>	<u>Effective Date</u>	<u>Pages</u>	<u>Effective Date</u>
1	10/27/92		
1A	09/15/96		
2	10/27/92		
3	08/15/94		
3A	02/01/95		
4	09/15/96		
5	09/15/96		
6	09/15/96		
7	10/27/92		
8	09/15/96		
9	09/15/96		
10	08/01/95		
11	10/27/92		
12-13A	08/01/95		
14-16	10/27/92		
16A	02/01/95		

The following DMRs for change are active for this procedure:

96-DMR-000765
95-DMR-000302
94-DMR-002275
94-DMR-002059
94-DMR-001324
94-DMR-001167
94-DMR-000862
93-PCN-000287

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
TITLE	1
TABLE OF CONTENTS	2
1. PURPOSE	3
2. SCOPE	3
3. DEFINITIONS	4
4. RESPONSIBILITIES	4
4.1 Operations Manager	4
4.2 Evolution Supervisor	5
4.3 Support Supervisors	5
4.4 Operations and Support Personnel	6
5. INSTRUCTIONS	7
6. RECORDS	10
7. REFERENCES	10
<u>Appendices</u>	
Appendix 1, Pre-Evolution Briefing Record	12
Appendix 2, Pre-Evolution Briefing Flow Chart	14
Appendix 3, Sample Pre-Evolution Briefing Monitoring Form	15

1. **PURPOSE**

- 1.1 This procedure describes the process for preparing, scheduling, and conducting Pre-Evolution Briefings (PEBs) to identify and address Conduct of Evolution to mitigate potential impacts to the public health, safety, or the environment resulting from a scheduled evolution.

2. **SCOPE**

- 2.1 This procedure applies to all conduct of evolutions performed at RFP. This activity or event includes but is not limited to the following types of evolutions that may be performed:

- (1) Radioactive decontamination work.
- (2) Radiation containment systems maintenance.
- (3) Startup of any process following an extended shutdown including post maintenance/modification testing.
- (4) Shutdown of any process for an extended period including any shutdown where the process or system is put in a nonroutine lay-up condition.
- (5) Experimental or nonroutine system operations/tests.
- (6) Nonroutine work requiring special personnel protective equipment.
- (7) Shipment, transfer, or inventory of fissile materials.
- (8) Nonroutine work with hazardous chemicals.
- (9) Infrequently conducted operations, surveillances, and preventive maintenance operations (PMOs) that operate equipment or systems (such as monthly, semi-annual, or annual surveillances or PMOs).
- (10) Other work/evolutions as determined by the OM.

- 2.2 Pre-evolution briefings may be waived at the discretion of the job supervisor when the same evolutions are being performed on a regular basis (more than once per week) by the same personnel.

94-DMR-001324 94-DMR-001162

94-DMR-001324

- 2.3 Pre-Evolution Briefing Record, Appendix 1, is used in conjunction with PEB requirements for Work Packages as identified in 1-74000-IWCP-5, Conduct of Work.
- 2.4 The Appendix 4, Hazardous Material Release Prevention/Preparedness Management Assessment Checklist is used in conjunction with the Pre-Evolution Briefing, if applicable, to accomplish the following:
- Identify any and all hazardous materials and their supporting systems associated with the work activity or operation. This identification should also include any nearby hazardous materials and systems that may be disturbed by the work activity/operation.
 - Identify any and all potential "Failure Points" in the work activity/operation that may result in the release of a hazardous material. Failure points may include such things as: valves, flanges, connection points, glass site gages, hoses/tubing, human error, and the movement of hazardous materials, including bottles or drums, etc.
 - Identify controls for prevention/minimization of release. That is, what barriers are or could be put into place at the failure points to prevent or minimize an inadvertent breach of containment and/or shield the targets (i.e., people, environment, or equipment). Barriers could include physical controls such as valve alignment, control panel design, secondary containment, lock outs/tag outs, etc. Also, administrative barriers could be used which may include: personnel surveillance, training, procedures, protective equipment, etc.
 - Development of a preplanned response to be taken in the event that a release does occur. This may include notification requirements, spill kit usage, protective equipment usage, immediate compensatory actions, etc.

94-DMR-002275

3. DEFINITIONS

3.1 **Evolution.** Any activity or event performed by plant personnel that must be planned and scheduled to ensure all health, safety, and environmental attributes associated with the activity or event have been identified and addressed.

96-DMR-000765

3.2 **Evolution Supervisor.** Individual who serves as the job lead for an evolution; who provides direct oversight of the evolution; identifies the scope of and prepares and conducts the PEB; and submits the PEB Record to the Operations Manager (OM). This person is often the person who originates and proposes the evolution, and is usually the supervisor of Operations and support personnel conducting the evolution.

3.3 **Pre-Evolution Briefing (PEB).** A complete review of the tasks necessary to perform an approved evolution, including applicable procedures, publications, Operational Safety Analysis (OSAs), and other pertinent safety precautions.

3.4 **Subcontract Supervisor.** Individual who directs the work of subcontracted personnel.

3.5 **Support Supervisor.** Individual who directs the work of personnel conducting tasks such as maintenance, security, and radiation protection, in support of an evolution.

4. RESPONSIBILITIES

4.1 **Operations Manager**

4.1.1 Reviews, approves, and schedules proposed evolutions.

4.1.2 Determines when the evolution should be scheduled for Plan of the Day (POD) meeting.

95-DMR-000302

4.1.3 Evaluates proposed evolutions and determines need for PEB.

4.1.3.1 For radiological work, a PEB is conducted prior to performing work which requires entry into a High Contamination Area, entry into an Airborne Radioactivity Area, or work which is anticipated to exceed the trigger levels identified in the ALARA Program Plan.

4.2 Evolution Supervisor

4.2.1 Ensures all proposed evolutions are shown as activities on the POD.

4.2.2 Determines the scope of the PEB to include all relevant topics commensurate with the evolution beyond a single shift.

4.2.2.1 When developing PEB scope, requests input from all affected Support Supervisors.

4.2.2.2 Determines need for additional PEBs if evolution is stopped and restarted in between time frame of greater than 2 hours.

4.2.2.3 Ensures that all personnel from multiple disciplines or multiple companies participating in the evolution attend the same PEB.

4.2.3 Ensures all preparations for the PEB are completed, including notifying required attendees.

4.2.4 Documents attendance and a summary of topics discussed on the PEB Record (if not adequately documented previously), Appendix 1.

4.2.5 Conducts PEBs, and completes and forwards PEB Record to the OM.

4.2.6 Serves as the job lead, directly overseeing the execution of the job and ensuring the coordination of personnel as planned in the PEB.

96-DMR-000765

95-DMR-000302

96-DMR-000765

4.3 Support Supervisors

4.3.1 Attend POD meetings and PEBs at the request of OMs or Evolution Supervisors for evolutions that impact their area of responsibility.

4.3.2 Ensure personnel assigned to support evolution have satisfied all initial and continuing training and qualification requirements.

4.4 Operations and Support Personnel

4.4.1 Review required procedures identified by the Evolution Supervisors and Support Supervisors for evolution that impact their area of responsibility.

4.4.2 Attend all PEBs for work in which they will participate as scheduled in the POD.

4.4.3 Ensure understanding of evolution, specifically:

- (1) Procedures to be followed.
- (2) Work plan logic.
- (3) Specific individual assignments.
- (4) Public health and safety concerns.
- (5) Nuclear Safety requirements.

4.4.3.1 Notify the Evolution Supervisor if any questions are not clarified at the PEB.

4.4.3.2 In the event that multiple disciplines or multiple companies are to participate in an evolution, all participants must take part in the same PEB.

96-DMR-000765

96-DMR-00765

5. INSTRUCTIONS

NOTE

An overview of the Pre-Evolution Briefing process is shown in Appendix 2, Pre-Evolution Briefing Flow Chart.

5.1 Evolution Supervisor includes all proposed evolutions in the scheduled POD meeting conducted by the OM.

5.1.1 Submits other information concerning the evolution to the OM at or prior to the POD meeting.

5.2 OM reviews and approves proposed evolutions for his building at the POD meeting, and determines when the evolution should be scheduled.

5.3 Evolution Supervisor conducts a PEB immediately prior to the evolution.

5.3.1 Ensures all Operations and support personnel involved with the evolution are provided with a list of applicable procedures prior to PEB.

5.3.1.1 Ensures adequate time is provided for Operations and support personnel to review procedures.

5.3.2 Ensures personnel attend who perform the evolution, review procedures, or sections of procedures, identified on the PEB Record (Appendix 1, Item D).

5.3.3 OMs or Evolution Supervisors ensure Support Supervisors attend POD meetings and PEBs.

5.3.3.1 Ensure Subcontract Supervisor(s) attend the PEB when proposed evolution impacts subcontract or personnel.

94-DMR-002275

5.3.4 Evolution Supervisor coordinates with Shift Manager to identify and evaluate unusual activities in areas where work is to be performed.

5.3.4.1 If applicable, the Evolution Supervisor coordinates with Shift Manager to complete Appendix 4, Hazardous Material Release Prevention/Preparedness Management Assessment Checklist.

5.3.5 Ensures the Shift Manager attends the PEB by notifying the affected Shift Manager prior to each PEB as appropriate.

5.3.6 Operations and support personnel involved with the evolution attend the PEB, and if necessary, ask questions regarding:

- (1) Evolution.
- (2) Procedures to be followed.
- (3) Work plan logic.
- (4) Specific, individual assignments.
- (5) Public health and safety matters.
- (6) Radiological concerns and Radiological Control elements.

96-DMR-000765

5.3.6.1 Personnel not directly involved in the evolution who are performing a support function as part of their normal duties are not required to attend the PEB. RCTs providing support must attend the PEB or be given a special briefing on the task, the hazards and Radiological Control elements when they arrive to provide support.

5.3.7 Evolution Supervisor addresses the following items at each PEB:

- (1) Brief description and stated objective(s) of the evolution
- (2) Initial conditions
- (2) Precautions taken by Operations management to ensure the equipment or system is in a safe configuration
- (3) Specific responsibilities and duties of all involved Operations and support personnel
- (4) Health, safety, and environmental precautions with special emphasis on the importance of understanding the applicable Nuclear Material Safety Limits (NMSLs) or Criticality Safety Operations Limits (CSOLs) before beginning work each shift.
- (5) Expected sequence of events and system or equipment response

5.3.7 (continued)

- (6) Actions to be taken in the event of an unplanned occurrence or emergency, and the personnel responsible for the actions
- (7) Each step of the evolution to be performed by Operations and support Personnel
- (8) Potential plant conditions, lockout/tagout, system alignments, shift changes, and existing or potential abnormalities
- (9) Communication systems and procedures, including operability checks and an understanding of how to acknowledge receipt and content of messages
- (10) Discussion and resolution of questions and comments
- (11) Lessons learned from previous evolutions
- (12) Hazard communication training information; identification of hazardous chemicals used, methods used to detect a release, and controls available to protect against over exposure:
 - Review items identified on the completed Appendix 4, if applicable.
- (13) A copy of a Material Safety Data Sheet (MSDS) for each hazardous chemical used is available at the PEB
- (14) Bring the specific building Waste Stream and Residue Identification and Characterization (WSRIC) manual or other waste determination data for a discussion of waste generation and disposal activities. The discussion will include the following:
 - Type of waste to be generated
 - Verification of waste generator training
 - Location of disposal area
 - Proper Waste/Residue Traveler instructions
 - Ensuring verifier is available
- (15) Radiological concerns and Radiological Control elements of the task
- (16) Other relevant topics
- (17) Verify all required personnel are Waste Generator Qualified.

5.3.8 Completes Briefing Check Off List on Appendix 1 to document all PEB topics are adequately addressed.

5.3.8.1 Conducts PEB at the evolution site when possible.

95-DMR-000302

95-DMR-002275

94-DMR-000862

96-DMR-000765

94-DMR-000862

5.3.8.2 Repeats PEB when there is a change in:

- (1) Operations and support personnel such as at shift change or the evolution is stopped and restarted in between time frame of greater than 2 hours.
- (2) Scope of the evolution.
- (3) Procedures required to perform the evolution.

94-DMR-001324 | 5.3.8.3 If the PEB is waived, then document the waiver.

5.4 Forwards completed Pre-Evolution Briefing Record (Appendix 1) to the OM for review.

5.5 If PEB is monitored in accordance with 1-31000-COOP-002, Internal Surveillance Program, a Pre-Evolution Briefing Monitoring Form, Appendix 3 is completed and forwarded to the OM for review.

6. RECORDS

6.1 Records generated as a result of this procedure are maintained in accordance with the Records Management Manual and the 1-48000-QAR-001, Quality Assurance Records.

7. REFERENCES

- 7.1 Department of Energy (DOE) Order 5480.19, Conduct of Operations Requirements for DOE Facilities
- 7.2 Health and Safety Practices Manual
- 7.3 Rocky Flats Plant (RFP) Records Management Manual
- 7.4 RFP Quality Assurance Manual
- 7.5 1-31000-COOP-002, Internal Surveillance Program
- 7.6 1-48000-QAR-001, Quality Assurance Records

7.7 1-74000-IWCP-1, Work Control Form Processing

7.8 1-74000-IWCP-5, Conduct of Work

PRE-EVOLUTION
BRIEFING

1-31000-COOP-011
REVISION 0
PAGE 12 OF 16

93-DMR-000302

APPENDIX 1

Page 1 of 3

PRE-EVOLUTION BRIEFING RECORD

Work Control No. and Revision No. (if applicable) _____

Evolution Supervisor: _____

A. Time, Date and Location of PEB: _____

B. Applicable Procedure Number _____

C. Evolution Description _____

D. Personnel Attending:

EMPL #	NAME	INITIALS	EMPL #	NAME	INITIALS
--------	------	----------	--------	------	----------

_____	_____	_____	_____	_____	_____
-------	-------	-------	-------	-------	-------

_____	_____	_____	_____	_____	_____
-------	-------	-------	-------	-------	-------

_____	_____	_____	_____	_____	_____
-------	-------	-------	-------	-------	-------

_____	_____	_____	_____	_____	_____
-------	-------	-------	-------	-------	-------

E. Trainees Attending:

EMPL #	NAME	INITIALS	EMPL #	NAME	INITIALS
--------	------	----------	--------	------	----------

_____	_____	_____	_____	_____	_____
-------	-------	-------	-------	-------	-------

_____	_____	_____	_____	_____	_____
-------	-------	-------	-------	-------	-------

_____	_____	_____	_____	_____	_____
-------	-------	-------	-------	-------	-------

_____	_____	_____	_____	_____	_____
-------	-------	-------	-------	-------	-------

Briefing Check Off List:

Initials
or N/A:

PRE-BRIEF

1. All required personnel are in attendance.

2. All required personnel have satisfied initial and continuing training and qualification requirements to perform the evolution.

3. All required personnel have reviewed the applicable documentation listed in B. above.

4. All required documents available at the PEB are approved and current.

5. The assigned PEB location is adequate for the briefing.

BRIEF

6. The evolution and PEB are scheduled on the POD.

7. The scope of work to be performed and responsibilities of each individual were specifically identified.

8. The current facility conditions, tagouts, valve lineups, and work permits relating to this evolution have been discussed.

95-DMR-000302

APPENDIX 1
Page 2 of 3

PRE-EVOLUTION BRIEFING RECORD (continued)

9. The precautions, limitations, initial conditions, and prerequisites were adequately reviewed. _____
10. Reliable and adequate communications are available, are verified operable and periodic operability checks are discussed. _____
11. The required tools and equipment are available, and verified operable. _____
12. The necessary instrumentation is adequately tested and calibrated. _____
13. All required alarms are in commission. _____
14. All personnel who will be taking, receiving or transmitting data are familiar with the data requirements. _____
15. Appropriate log sheets, material transfer, and data recording forms are available. _____
16. Personnel are informed of expected instrument readings and system response. _____
17. The potential hazards associated with the evolution have been discussed (OSA). _____
18. Identification of hazardous chemicals used, methods used to detect a release and controls available to protect against over exposure have been discussed. All required personnel are waste Generator Qualified. _____
- 18A. Are hazardous materials (e.g., substances, wastes, or chemicals) present?
[] Yes [] No (If answer is No, no further action is required. If yes, complete Appendix 4.) _____
19. All necessary safety equipment is available. _____
20. Personnel protective equipment requirements have been discussed. _____
21. Dosimetry and radiological conditions and requirements have been discussed. _____
22. Actions to be taken in the event of casualties were discussed. _____
23. Related past problems, unusual events, and occurrences were discussed. _____
24. Potential shift changes and watch reliefs discussed. _____
25. All applicable NMSLs and CSOLs have been discussed. _____
26. All personnel understand egress procedures and egress areas. _____
27. Special radiological control requirements have been discussed. _____
28. Radiological limiting conditions that would void the RWP (if applicable) have been discussed. _____
29. Radiological control hold points have been discussed _____
30. Provisions for housekeeping and final clean up have been identified. _____
31. All applicable pages from the WSRIC have been discussed and available. _____
32. A final summary of the evolution was performed. _____
33. All questions have been adequately answered. _____

95-DNR-000302

94-DNR-002375 93-A-N-000287

94-DNR-002051

95-DNR-000302

APPENDIX 1

Page 3 of 3

95-0212-000302

Summary of Topics Discussed (if not adequately documented previously): _____

The above minimum requirements have been met and I acknowledge that the individuals performing this evolution are fully trained and qualified. I personally conducted this PEB in sufficient detail to ensure safe conduct of the evolution.

Evolution Supervisor

/_____
Date

Reviewed by:

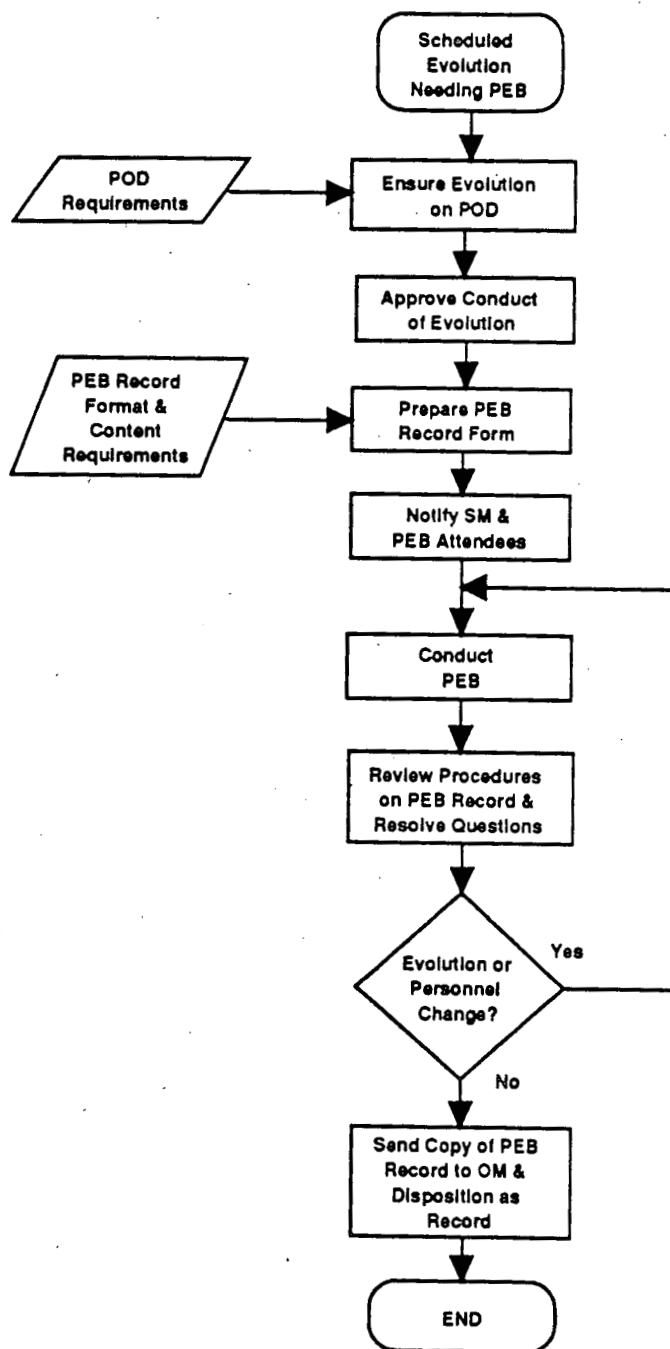
Operations Manager

/_____
Date

APPENDIX 2

Page 1 of 1

PRE-EVOLUTION BRIEFING FLOW CHART



APPENDIX 3

Page 1 of 2

SAMPLE PRE-EVOLUTION BRIEFING MONITORING FORM

	YES	NO	N/A
1. Are all key personnel in attendance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Have key personnel reviewed appropriate procedures, technical manuals prior to the briefing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are personnel who will be taking, receiving, or transmitting data familiar with the data requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are all required documents (procedures, surveys, drawings, manuals) available and current?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is the location of the PEB adequate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Does the PEB leader have an outline or lesson plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Did personnel actively participate in the PEB?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were seminar-like questions presented by the PEB Leader?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Was the PEB conducted in an orderly manner?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A. Was an overview given?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Were precautions, limitations, initial conditions, and prerequisites adequately reviewed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Were side conversations (discussion groups) adequately controlled?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Was the PEB conducted with a minimum number of distractions and interruptions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. Was a final summary performed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Were visual aids used?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Were all questions adequately answered?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Were all assignments and responsibilities specifically identified?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Was the PEB conducted by a person with the appropriate level of qualification and experience?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX 3

Page 2 of 2

		YES	NO	N/A
14.	Were problems, unusual events, or incidents including causes and corrective actions for testing or work discussed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.	Were special test equipment and instrumentation including causes and corrective actions for previous testing or work discussed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.	Were actions to be taken in case of casualties discussed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.	Were potential shift changes and watch reliefs discussed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.	Were communications discussed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.	Were current plan conditions, tagouts, valve lineups, or abnormalities relating to this evolution discussed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20.	Is the item scheduled on the POD?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21.	Do personnel at the PEB demonstrate understanding of what is to be accomplished by this evolution, what is expected of them, and how the equipment will respond during this evolution?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22.	Was the Hazard Communication Program adequately discussed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23.	Are hazard chemicals to be used during the performance of the task?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24.	Are MSDS's available?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25.	Were all questions adequately answered?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Monitored By: _____

_____ Date

Comments: _____

APPENDIX 4

Page 1 of 1

**HAZARDOUS MATERIAL RELEASE PREVENTION/PREPAREDNESS
MANAGEMENT ASSESSMENT CHECKLIST**

Completed by: _____ Date: _____

Evolution title: _____

Evolution Type: ☐ Routine ☐ Non-Routine

Evolution Frequency: _____ Assessment Frequency: _____

Are hazardous materials (e.g., substances, wastes, or chemicals) present?

☐ YES ☐ NO (If answer is NO, no further action is required.)

1. Identify the hazardous material and associated systems. (Concentrations and Volumes)

2. Identify potential "Failure Points" in these systems.

☐ Valves _____
☐ Flange connections _____
☐ Sight Gages _____
☐ Hoses or tubing _____
☐ Liquid transfer points/containers _____
☐ Other: _____

3. Recommended controls for prevention/minimization of release:

4. Pre-planned response recommendations: (If HASP, JSA, etc., is available, list the document and review requirements. Specify incidental or emergency response threshold and appropriate PPE/remediation.)

USE ADDITIONAL SHEETS AS NECESSARY

94-DMR-002275

Rocky Flats Plant 1-31000-COOP-012

REVISION 0

SHIFT OPERATING ROUNDS

APPROVED BY: *H. Zane* 10/9/92

General Manager,
Rocky Flats Plant

Date

Responsible Organization: Plutonium Production

Effective Date: October 27, 1992

CONCURRENCE:

/s/ G. E. Marx 9/3/92

Associate General Manager,
Administration and Planning

Date

/s/ H. S. Berman 9/17/92

Associate General Manager,
Engineering

Date

/s/ J. M. Kersh 9/7/92

Associate General Manager,
Environmental Restoration Management

Date

/s/ J. M. Kersh 9/7/92

Associate General Manager,
Environmental and Waste Management

Date

/s/ E. H. Ideler 9/2/92

Associate General Manager,
Facility Management and Operations

Date

/s/ D. W. Ferrera 9/10/92

Associate General Manager,
Maintenance and Plant Support

Date

/s/ L. C. Smith for J. G. Davis 9/15/92

Associate General Manager,
Performance and Quality Assurance

Date

/s/ J. H. Riley 9/18/92

Associate General Manager,
Plant Safety and Security

Date

Site Operations Review Committee Chairman 10/06/92

Date

Subject Matter Expert 10/06/92

Date

AFFECTS PLANT SAFETY
PROCEDURE USE CATEGORY 3

CONTROLLED COPY

The following PRRs have been incorporated in this revision:
92-000585

Reviewed for Classification

By *Dr. Butler - UNCL*

Date 10-6-92

This procedure supersedes procedure COOP-012, Revision 1.

PADC-92-00450

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
TITLE	1
TABLE OF CONTENTS	2
1. PURPOSE	3
2. SCOPE	3
3. DEFINITIONS	3
4. RESPONSIBILITIES	4
4.1 Operations Manager (OM)	4
4.2 Shift Manager (SM) or Responsible Supervisor Reporting to the SM ..	4
4.3 Shift Technical Advisor	5
4.4 Operations Personnel	5
5. INSTRUCTIONS	6
5.1 Rounds Sheet Development and Control	6
5.1.1 Rounds Sheet Content and Format	6
5.1.2 Rounds Sheet Control	7
5.2 Conduct of Inspection Tours	8
5.2.1 General Requirements	8
5.2.2 Tour Frequency	9
5.2.3 Equipment Status and Operability	9
5.2.4 Abnormal or Unusual Conditions	11
5.2.5 Off Normal Conditions	12
5.3 Review and Monitoring of Inspection Tours	13
5.3.1 Rounds Sheet Review and Disposition	13
5.3.2 Operator Rounds Monitoring	14
6. RECORDS	14
7. REFERENCES	14
<u>Appendices</u>	
Appendix 1, Shift Operating Rounds Flow Chart	16
Appendix 2, Sample Rounds Sheet Format	17
Appendix 3, Inspection Round Checks	19

1. **PURPOSE**

- 1.1 This procedure provides instructions for performing operator rounds to monitor and record system and process parameters for each operating shift.
- 1.2 This procedure provides instructions for recording equipment parameters during tours to provide a record of equipment performance and for use in reconstructing unusual occurrences or system malfunctions.
 - 1.2.1 Recorded information is used to identify and correct undesirable trends and equipment problems. Additionally, turnover of equipment status is facilitated.

2. **SCOPE**

- 2.1 This procedure applies to vital safety systems, process systems, and support systems.
- 2.2 This procedure applies to all personnel required to monitor and record the operating status of a system, component, or selected piece of equipment.

3. **DEFINITIONS**

- 3.1 **Rounds Sheets.** Controlled logs used by operations personnel to collect specific data, record equipment status, note unusual condition, and plot performance trends.

4. RESPONSIBILITIES

4.1 Operations Manager (OM)

- 4.1.1 Ensures that appropriate rounds sheets are developed for all work stations that require periodic rounds to be performed and data recorded as necessary.
- 4.1.2 Approves rounds sheets.
- 4.1.3 Ensures that rounds sheets and indexes are distributed to all work stations that require periodic rounds to be performed and data recorded as necessary.
- 4.1.4 Maintains an index of currently effective rounds sheets.
- 4.1.5 Resolves any safety issues resulting from plant security restrictions.
- 4.1.6 For buildings that do not require Shift Technical Advisors (STAs), assigns similar duties to other qualified individuals.

4.2 Shift Manager (SM) or Responsible Supervisor Reporting to the SM

- 4.2.1 Determines immediate corrective action in the event of abnormal, unusual, or deficient conditions.
- 4.2.2 Initiates corrective action for reported deficiencies in accordance with 1-74000-IWCP-1, Work Control Form Processing.
- 4.2.3 Monitors operator performance during inspection rounds and evaluates the results obtained.

4.2.4 Reviews completed rounds sheets to identify trends, and verifies rounds sheets are complete, accurate, neat, and legible.

4.2.5 Uses information from rounds sheets in shift relief and turnover briefings.

4.3 Shift Technical Advisor

NOTE

For buildings that do not require STAs other qualified individuals may be assigned similar duties as determined by the OM.

4.3.1 Reviews rounds sheets to identify equipment status, condition, and performance trends.

4.3.2 Provides assistance in correcting any deficiencies or abnormal conditions.

4.4 Operations Personnel

4.4.1 Ensure that the latest revisions of rounds sheets are used.

4.4.2 Perform assigned inspection tours.

4.4.3 Report abnormal, unusual, or deficient conditions and trends to responsible supervision.

4.4.4 Take action to correct deficiencies identified during inspection tours.

4.4.5 Review completed rounds sheets to verify completeness.

NOTE

An overview of the process for shift operating rounds is shown in Appendix 1, Shift Operating Rounds Flow Chart.

5. INSTRUCTIONS

5.1 Rounds Sheet Development and Control

5.1.1 Rounds Sheet Content and Format

- 5.1.1.1 OM ensures that rounds tour paths and inspection sheets are developed for all work stations that require periodic rounds to be performed and data recorded in accordance with this procedure.
- 5.1.1.2 Ensures rounds sheets guide the responsible individual by listing important equipment parameters and other information to be obtained, including:
 - (1) System or equipment name.
 - (2) Component identification number.
 - (3) Parameter to be observed, including the display identification.
 - (4) Maximum, minimum, and normal values of key parameters.
- 5.1.1.3 Individual creating or revising rounds sheets follows the format of Appendix 2, Sample Rounds Sheet Format.
- 5.1.1.4 Includes a unique identifier, revision level, page number, and total number of pages on each page of rounds sheets.
- 5.1.1.5 Highlights safety limits derived from the Operational Safety Requirements.

- 5.1.1.6 Lists equipment on rounds sheets in a logical order, such as the sequence found along the path of a normal tour.
- 5.1.1.7 Includes a comments section for the entry of information for which space has not been provided.
- 5.1.1.8 Operations personnel use comments section (or narrative log if used) to document description of the causes, notifications made, and action taken in the event of abnormal conditions.
- 5.1.2 **Rounds Sheet Control**
 - 5.1.2.1 The OM or other responsible manager reviews new and revised rounds sheets and approves the rounds sheet by signing the cover page.
 - 5.1.2.2 Distributes rounds sheets to controlled supply locations accessible to the responsible individuals from their work stations.
 - 5.1.2.3 Ensures an index of currently effective rounds sheets containing rounds sheet title, unique identifier, and revision level is easily accessible to responsible individuals.
 - 5.1.2.4 Individuals performing rounds use only the latest revision of the applicable rounds sheet.

5.2 Conduct of Inspection Tours

5.2.1 General Requirements

- 5.2.1.1 General practices and requirements for logs and data sheets are controlled in accordance with 1-31000-COOP-006, Operating Area Logs and Records.
- 5.2.1.2 If plant security restrictions prohibit operators from performing safety assessment duties, the OM resolves any resulting safety issues.
- 5.2.1.3 Operations personnel conduct inspection tours early in the shift following shift turnover, if possible, to ensure familiarity with the condition and status of equipment within the operator's responsibility.
- 5.2.1.4 When performing rounds, include a thorough general inspection of the assigned areas. (See Appendix 3, Inspection Round Checks.)
- 5.2.1.5 Use the comments section of rounds sheets or narrative log if insufficient space remains on round sheets to document:
- (1) Major evolutions.
 - (2) Abnormal conditions.
 - (3) Causes and trends identified from abnormal conditions.
 - (4) Notifications made and actions taken to correct abnormal conditions or trends.
 - (5) Equipment run time.
- 5.2.1.6 Record data on rounds sheets as close as possible to the specified recording times in the space provided. Use black ink unless otherwise specified.

- 5.2.1.7 If the data is not obtained within 1 hour of the specified time, use the comments section to record the actual time the data was taken, the reason for the delay, and the responsible supervisor's initials.

5.2.2 Tour Frequency

- 5.2.2.1 Operations personnel conduct a thorough tour of all areas within their responsibility at least once per shift (8-hour or 12-hour) except:

5.2.2.1.1 If adverse radiological or personnel safety conditions exist in an area, the OM may limit, by a signed entry in the comments section, the tour frequency and duration of inspections in such areas to levels consistent with the importance of the information, maintaining radiation exposure as low as reasonably achievable (ALARA), and other similar considerations.

5.2.2.1.2 If equipment problems have been identified, the SM may specify, by a signed entry in the comments section, more frequent tours as conditions dictate.

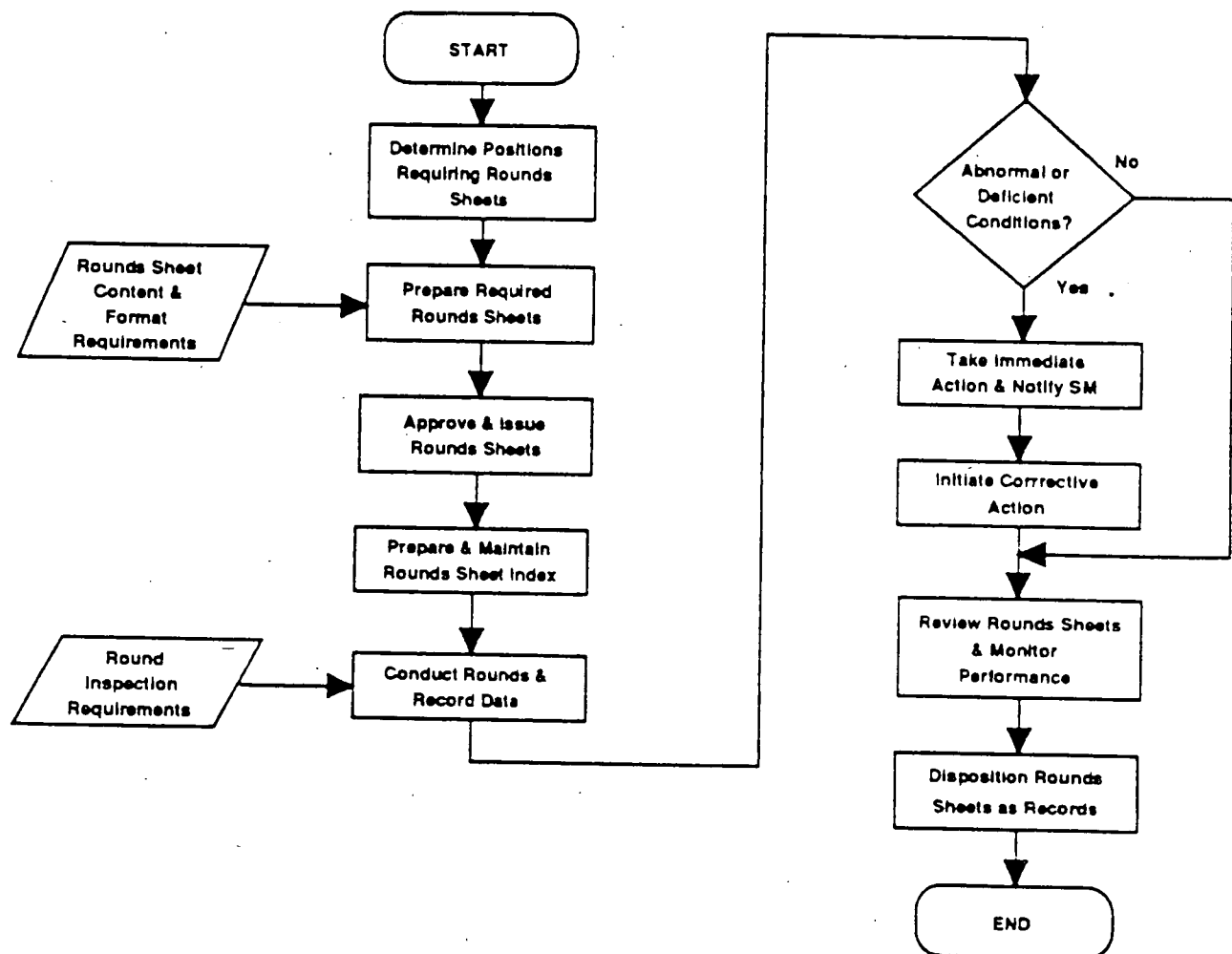
- 5.2.2.2 Perform designated equipment inspections as indicated on rounds sheets.

5.2.3 Equipment Status and Operability

- 5.2.3.1 Operations personnel conduct inspections with sufficient detail to ensure that the status of all equipment in the individual's area of responsibility is known.

APPENDIX 1
Page 1 of 1

SHIFT OPERATING ROUNDS FLOW CHART



5.2.3.2

Conduct inspection tours that verify:

- (1) Operating equipment is functioning properly.
- (2) Standby equipment is fully operable (for example, power available and key valves, dampers, controls, and breakers correctly aligned).
- (3) Equipment panel alarm light bulbs and annunciator visual and audible features are operable.

5.2.3.3

Determine and record in comments section if equipment status is:

- (1) Operating with observed deficiencies or problems.
- (2) On standby and fully operable.
- (3) Inoperable due to observed deficiencies.
- (4) Out of service (OOS) awaiting planned inspection, testing, maintenance, or other work.
- (5) OOS with inspection, testing, maintenance, or other work in progress.
- (6) Out of commission (OOC).

5.2.3.4

Briefly observe any work in progress encountered during rounds and ensure that:

- (1) Equipment being worked on is properly locked out and tagged out in accordance with 1-15320-HSP-2.08, Lockout/Tagout.
- (2) The correct equipment is being worked on.

5.2.4 Abnormal or Unusual Conditions

- 5.2.4.1 Operations personnel inspect components, including electrical panels, alarm panels, auto-start standby equipment, and breakers, as a minimum, for external indications of abnormal or unusual conditions.
- 5.2.4.2 Report abnormal, unusual, or other unexpected conditions, including equipment vibration, excessive temperatures, or unusual noises or smells to the responsible supervisor.
- 5.2.4.3 Identify abnormal or out-of-tolerance readings:
 - 5.2.4.3.1 Circle and number abnormal or out-of-tolerance values in red ink.
 - 5.2.4.3.2 Explain numbered readings that are abnormal or out of tolerance in the comments section.
 - 5.2.4.3.3 If corrective or remedial action is taken or initiated, record action and result in the comments section.
 - 5.2.4.3.4 Notify the responsible supervisor as soon as practical of all circled readings.
 - 5.2.4.3.5 Enter the person notified and time of notification in the comments section.
 - 5.2.4.3.6 Investigate abnormal or unexpected indications promptly, involving the responsible supervisor as appropriate, and record results, including apparent cause of the condition and action taken in the comments section.

5.2.4.3.7 Record deficiencies resulting from the out-of-tolerance or abnormal reading in the comments section.

5.2.4.4 If the equipment is not operating but is available for service or is out of service for maintenance, testing, inspection, or other planned work:

5.2.4.4.1 Do not consider readings as out of tolerance.

5.2.4.4.2 Enter status, such as SHUTDOWN, OUT OF SERVICE FOR MAINTENANCE, OUT OF COMMISSION, or other appropriate entry on the rounds sheet.

5.2.5 Off Normal Conditions

5.2.5.1 Actions that may be taken by operations personnel during rounds to correct off normal conditions include but are not limited to:

- (1) Correction or containment of minor leaks.
- (2) Minor equipment adjustments to optimize operating parameters.
- (3) Initiation and placement of Caution Tags.
(See 1-31000-COOP-008, Control of Caution Tags.)
- (4) Cleaning equipment.
- (5) General housekeeping.

NOTE

Off normal condition may lead to accidents, injury, or equipment damage.

5.2.5.2 If an off normal condition is observed, operations personnel correct the condition immediately.

- 5.2.5.3 If correction of the off normal condition includes adjustments or other actions not required by a procedure, correct the condition immediately.
- 5.2.5.4 Immediately report all off normal conditions to the responsible supervisor, and document notification and corrective action taken in the comments section of the rounds sheet.
- 5.2.5.5 Process equipment deficiencies not considered emergencies in accordance with 1-74000-IWCP-1, Work Control Form Processing.

5.3 Review and Monitoring of Inspection Tours

5.3.1 Rounds Sheet Review and Disposition

- 5.3.1.1 When the round has been completed, the performing individual reviews the completed rounds sheets and ensures that:
 - (1) Abnormal and out-of-tolerance readings are circled in red and numbered.
 - (2) A brief explanation of abnormal and out-of-tolerance readings has been entered in the comments section and numbered to correlate with the circled reading.
 - (3) Initials of the performing individual are entered in the provided space.
- 5.3.1.2 When review of the rounds sheet by the performing individual has been completed, the supervisor of the performing individual reviews and initials rounds sheet to:
 - 5.3.1.2.1 Identify trends or abnormal readings.

5.3.1.2.2 Verify that data has been properly recorded.

5.3.1.2.3 Determine what corrective action has been taken or initiated and assess the need for further action, notifications, or reports.

5.3.1.2.4 Evaluate completeness, accuracy, neatness, and legibility.

5.3.1.3 Rounds sheets are used in the shift relief and turnover process in accordance with 1-31000-COOP-007, Shift Relief and Turnover.

5.3.2 Operator Rounds Monitoring

5.3.2.1 The responsible supervisor periodically monitors rounds sheets in accordance with 1-31000-COOP-002, Internal Surveillance Program.

5.3.2.2 If deficiencies are observed, provides constructive feedback to operators or makes corrective revisions to rounds sheets.

6. RECORDS

6.1 Records generated as a result of this procedure are maintained in accordance with the RFP Records Management Manual and 1-48000-QAR-001, Quality Assurance Records.

7. REFERENCES

7.1 Department of Energy (DOE) Order 5480.7, Fire Protection

7.2 DOE Order 5480.11, Radiation Protection for Occupational Workers

- 7.3 DOE Order 5480.19, Conduct of Operations Requirements for DOE Facilities
- 7.4 RFP Records Management Manual
- 7.5 1-15320-HSP-2.08, Lockout/Tagout
- 7.6 1-31000-COOP-002, Internal Surveillance Program
- 7.7 1-31000-COOP-006, Operating Area Logs and Records
- 7.8 1-31000-COOP-007, Shift Relief and Turnover
- 7.9 1-31000-COOP-008, Control of Caution Tags
- 7.10 1-48000-QAR-001, Quality Assurance Records
- 7.11 1-50000-ADM-15.01, Control of Nonconforming Items
- 7.12 1-74000-IWCP-1, Work Control Form Processing

APPENDIX 2

Page 1 of 2

SAMPLE ROUNDS SHEET FORMAT

Status Key: N = Normal A = Abnormal I = Inoperable D = Downby W = Work in progress					Round Sheet No.
Freq Key: 1H = Once per hour 2H = Twice per hour 1S = Once per shift 2S = Twice per shift etc.					Revision
<h2 style="margin: 0;">ROCKY FLATS PLANT ROUNDS SHEET</h2>					Page _____ of _____
Operations Manager Approval					Date
Approval Date		Building No.		Work Station	
Equipment / Area	Freq (See Key)	Status (See Key)	Operating Parameter		Problems / Comments
			Max / Min / Normal	Actual	
Performer Name			Performer Review		
Time Started		Time Completed		Supervisor Review	

**ROCKY FLATS PLANT
ROUNDS CONTINUATION
SHEET**

[illegible]

APPENDIX 3

Page 1 of 3

INSPECTION ROUND CHECKS

Inspection rounds include, but not limited too, the checks listed in this appendix.

1. General Area

- (1) Satisfactory housekeeping and cleanliness
- (2) Vent and drain caps installed
- (3) Electrical covers installed and tight
- (4) Drain and vent hoses properly installed in accordance with procedures
- (5) Insulation installed and undamaged
- (6) Noise and vibration levels normal
- (7) Equipment, especially safety equipment, easily accessible
- (8) Equipment and component labels installed and readable
- (9) Oil, steam, or water leakage noted
- (10) Caution or information tags adequately attached and properly filled out
- (11) Fire, radiological, and other safety hazards noted and reported
- (12) RCRA where appropriate
- (13) Radiation and contamination areas clearly marked and required postings in place
- (14) Floor drains (except those intentionally plugged) open and accessible
- (15) Sump levels in normal range
- (16) Abnormal sump pump running times noted
- (17) Idle equipment in stand-by condition or out of service, as appropriate
- (18) Condition of safety systems, snubbers, and pipe hangers noted
- (19) Open electrical panels, mobile objects, or other seismic concerns noted
- (20) Inoperable lighting, roof leaks, doors with closure problems, or other building deficiencies
- (21) Combustible zones free of combustible material
- (22) Check for uncontrolled operator aids made

2. Electrical Panels

- (1) Breakers properly aligned
- (2) Indicating lights and labels in the correct position
- (3) Control power available
- (4) Any abnormal smells noted
- (5) Out-of-service electrical equipment properly tagged
- (6) Electrical panel covers and doors closed

APPENDIX 3
Page 2 of 3

3. Transformers

- (1) Liquid levels, temperatures, and pressures normal

4. Local Control Panels

- (1) Alarms not annunciating, or alarms that are annunciating are normal for the plant status, and reason they are up is known
- (2) Recorders operating properly
- (3) Gauges, meters, and indicators within normal bands
- (4) Indicating lights operable
- (5) Notification made to control room when testing annunciators

5. Safety Hazards

- (1) Gas cylinders secured, with caps installed if bottle not connected
- (2) Water leakage around energized equipment noted
- (3) Walking surfaces free of water or oil
- (4) High radiation area doors locked or guarded
- (5) Combustible material stored properly
- (6) Random checks of fire equipment and inspection dates made
- (7) Scaffolds, temporarily stored materials, or ladders do not create a hazard to equipment or personnel
- (8) No carts or maintenance equipment chained to plant equipment
- (9) Unidentified liquid storage containers removed from the plant
- (10) Carts or equipment on wheels stored or wheels locked

APPENDIX 3

Page 3 of 3

6. Equipment Checks

- (1) Motor and pump housing temperatures and vibration normal
- (2) Bearing temperatures normal
- (3) Oil cooler temperatures normal
- (4) Noise levels normal
- (5) Belt tightness proper
- (6) Pump suction and discharge pressures normal
- (7) Ground straps connected to motors
- (8) Coupling guards in place
- (9) Fluid leakage normal and wiped as required
- (10) Ventilation intakes clear of debris and dust
- (11) Lube oil levels on running equipment normal
- (12) Equipment lube water flows proper
- (13) Burned out light bulbs replaced or reported to the responsible supervisor
- (14) Outdated caution and information tags removed
- (15) Station air compressor receiver tanks and aftercoolers blown down to remove moisture accumulation

7. Wires and Cables

- (1) Lifted wires and jumpers properly identified
- (2) Hold-down straps secure

8. Doors and Gates

- (1) Closed and locked as required

RF-47940 (5/93) PADC-94-01662

REVIEWED FOR CLASSIFICATION / UCNI

BY 1/26/2024
DATE 1/24/25/95 / UNW

DMR (continuation sheet)

Page 2 of 3

Refer to 1-A01-PPG-001 for Processing Instructions.
Print or Type All Information (Except Signatures).

25. DMR No. 95-DMR-000617

2. or 3. Document Number/Revision			5. Document Title	
58-COOP-013/ REV. 0			STANDING, SHIFT, AND OPERATIONS ORDERS	
8. Item	9. Page	10. Step	11. Proposed Modifications	
5	23	7.1[7][K]	<p>Change organizations to disciplines, delete the bullet entries, and add the following sub steps.</p> <p>[A] For non-nuclear safety related Technical Operations Orders: Industrial Health and Safety (only required for non-nuclear safety issues) Engineering (technical staff assigned to the affected facility or as assigned by the Systems Engineering Manager)</p> <p>[B] For Technical Operations Orders that may impact the authorization basis: Nuclear Safety Engineering Engineering (technical staff assigned to the affected facility or as assigned by the Systems Engineering Manager)</p> <p>Existing, approved safety basis documents such as EOE's, USQDs, or JCOs, may be used as a basis for content and approval of Technical Operations Orders. Only Engineering concurrence is required to ensure appropriate implementation of technical requirements (such as compensatory measures specified by an EOE or USQD) when approved safety basis documents exist. An SES or USQD is required, unless otherwise determined by Nuclear Safety Engineering, when safety basis documents do not exist.</p>	
6	23	7.1[11]	<p>Change required organizations to disciplines, delete the bullet entries, and add the following sub steps.</p> <p>[A] For non-nuclear safety related Technical Operations Orders: Industrial Health and Safety (only required for non-nuclear safety issues) Engineering (technical staff assigned to the affected facility or as assigned by the Systems Engineering Manager)</p> <p>[B] For Technical Operations Orders that may impact the authorization basis: Nuclear Safety Engineering Engineering (technical staff assigned to the affected facility or as assigned by the Systems Engineering Manager)</p> <p>Existing, approved safety basis documents such as EOE's, USQDs, or JCOs, may be used as a basis for content and approval of Technical Operations Orders. Only Engineering concurrence is required to ensure appropriate implementation of technical requirements (such as compensatory measures specified by an EOE or USQD) when approved safety basis documents exist. An SES or USQD is required, unless otherwise determined by Nuclear Safety Engineering, when safety basis documents do not exist.</p>	
12. Justification (Reason for Modification)				
5 and 6. See Item 4.				

DMR (continuation sheet)

Page 3 of 3

Refer to 1-A01-PPG-001 for Processing Instructions.
Print or Type All Information (Except Signatures).

25. DMR No. 95-DMR-000617

2. Document Number/Revision 3-COOP-013/ Rev. 0			5. Document Title STANDING, SHIFT, AND OPERATIONS ORDERS		
8. Item	9. Page	10. Step	11. Proposed Modifications		
7	35	Apdx 1	<p>In the Basic Check list, second paragraph, change organizations to disciplines, delete the bullet entries, and add the following sub steps.</p> <p>[A] For non-nuclear safety related Technical Operations Orders (only question 4 is checked YES): Industrial Health and Safety (only required for non-nuclear safety issues) Engineering (technical staff assigned to the affected facility or as assigned by the Systems Engineering Manager)</p> <p>[B] For Technical Operations Orders that may impact the authorization basis (questions 1,2,3,or 5 or the extended checklist is checked YES): Nuclear Safety Engineering Engineering (technical staff assigned to the affected facility or as assigned by the Systems Engineering Manager)</p> <p>Existing, approved safety basis documents such as EOE's, USQDs, or JCOs, may be used as a basis for content and approval of Technical Operations Orders. Only Engineering concurrence is required to ensure appropriate implementation of technical requirements (such as compensatory measures specified by an EOE or USQD) when approved safety basis documents exist. An SES or USQD is required, unless otherwise determined by Nuclear Safety Engineering, when safety basis documents do not exist.</p>		

12. Justification (Reason for Modification)

7. See item 4.

PAGE 1 of 1

25. DMR No. 94-DMR-002083

DATE 1.21.88/94

DOCUMENT MODIFICATION REQUEST (DMR)

Refer to 1-A01-PPG-001 for Processing Instructions.
Print or Type All Information (Except Signatures)

1. Date 9/21/94	25. DMR. No. 94-DMR-001772
3. New Document Number or Document Number if it is to be changed with this Revision N/A	
5. Document Title STANDING, SHIFT, AND OPERATIONS ORDERS	

2. Existing Document Number/Revision
1-G-001-001-013

4. Originator's Name/Phone/Page/Location
Miller Collins/9016/4135/Bldg. 013 *mqc*

6. Document Type ■ Procedure
☐ Other

7. Document Modification Type (Check only one)

☐ New ☐ Revision ☒ Intent Change ☐ Nonintent Change ☐ Editorial Correction ☐ Cancellation

8. Item	9. Page	10. Step	11. Proposed Modifications
1.	6	N/A	End sentence after "issued" as shown on the attached pages.
2.	23	7.1[7][K] [6] 7.1[6] - & CK - 4/2/94	Delete "Quality Program" from both steps.
3.	35	7.1[11] App. 1	Delete "Quality Program" from page 1 of Appendix 1

12. Justification (Reason for Modification, EJO#, TP#, etc.)

In accordance with DOE 5700.6C, "...quality assurance should be recognized as an interdisciplinary function involving many organizational components and should not be regarded as the sole domain of any single quality assurance group. Achieving quality is the responsibility of people throughout the organization..." The existing Rocky Flats Quality Assurance Program (QAP) carried over some of the original criteria and requirements of DOE 5700.6B, after DOE 5700.6C was issued. This criteria from DOE 5700.6B was somewhat more stringent regarding compliance with technical standards such as ANSI/ASME NQA-1, etc. Current Rocky Flats philosophy is such that only what is necessary and sufficient for the QAP is considered to be required. These necessary and sufficient requirements are to be based on the criteria of DOE 5700.6C. As a result, up front and in-line quality review of documents is not considered mandatory. By emphasizing line management responsibility for the quality of their documents, the principles of total quality management are better applied at Rocky Flats and the objective of line organizations achieving quality is better realized.

Review and evaluation of overall performance will continue to be tracked and verified using the site assessment process.

If modification is for a new procedure or a revision, list concurring disciplines in Block 13, and enter N/A in Blocks 14 and 15. If modification is for any type of change or a cancellation, organizations are listed in Block 13, then Concurrency prints, and signs in Block 14, and dates in Block 15.

3. Organization	14. Print and Sign (if applicable)	15. Date (if applicable)
A	151 L.C. Smith for W.S. Colver	9/27/94
E	151 G.S. Hyatt	9/26/94
M	151 J.G. Hedahl	9/29/94
S	151 K.P. Ferrera for R.E. Fray	10/6/94
D	151 S.C. Burkhardt for P.M. Coogan	9/28/94
D	151 V.M. DiZzuto	9/30/94
R	151 S.G. Stiger	10/4/94
NM&S	151 Robert Cleland for G. Vagheis	9/23/94
S	151 B.T. Stegner for J.A. Geis	9/26/94
ASS	151 B.E. Kell	9/29/94
S	151 D.W. Ferrera	9/23/94

6. Originator's Supervisor (print/sign/date) Matt Hadachuk <i>9-21-94</i>		18. Cost Center 0373	19. Charge Number 834218.33	20. Requested Completion Date 10/1/94	21. Effective Date 10/28/94
7. Assigned SME/Phone/Page/Location Miller Collins/9016/4135/Bldg. 013		23. ORC Review SOPC-94-47 <i>Don R. Benton</i>			
8. Accelerated Review? Yes ■ No <input type="checkbox"/>		9. Responsible Manager (print, sign, date) <i>Daniel B Branch Jr</i> <i>Daniel Branch</i> 10/1/94			

REVIEWED FOR CLASSIFICATION/UCN

BY *Theresa Anis*
DATE 9/24/94 *UNU*

PADC-94-01662

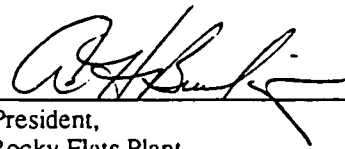
Rocky Flats Plant

1-G58-COOP-013

REVISION 0

STANDING, SHIFT, AND OPERATIONS ORDERS

APPROVED BY:


President,
Rocky Flats PlantA. H. Burlingame
Print Name17/15/94
Date

States that to the best of my knowledge, the necessary and sufficient Requirements, Codes, and Standards are met.

Responsible Organization: Building Deactivation

Effective Date:

8/15/94

CONCURRENCE BY THE FOLLOWING DISCIPLINES IS DOCUMENTED IN THE PROCEDURE HISTORY FILE:

Administration Services
Engineering and Safety Services
Environmental Restoration
Waste Management
Building Deactivation
Support Services
Performance Assurance

USE CATEGORY 4

ORC review SORC-94-31 (07/14/94)

The following have been incorporated in this revision:
93-DMR-000804

Reviewed for Classification/UCNI

By

Mary K. Fize (U/NU)

Date

7/15/94

This procedure supersedes procedure 1-31000-COOP-013, Revision 0.

Periodic review frequency: 4 years from the effective date

CONFIDENTIAL

PADC-94-01662

LIST OF EFFECTIVE PAGES

<u>Pages</u>	<u>Effective Date</u>	<u>Change Number</u>
1	08/15/94	
2	10/28/94	94-DMR-001772
	12/21/94	94-DMR-002083
	05/05/95	95-DMR-000617
3-5	08/15/94	
6	10/28/94	94-DMR-001772
7	05/05/95	95-DMR-000617
8-11	08/15/94	
12	05/05/95	95-DMR-000617
13	08/15/94	
14	05/05/95	95-DMR-000617
15	12/21/94	94-DMR-002083
	05/05/95	95-DMR-000617
16-17	08/15/94	
18	12/21/94	94-DMR-002083
19-22	08/15/94	
23-23A	10/28/94	94-DMR-001772
	05/05/95	95-DMR-000617
24-34	08/15/94	
35	10/28/94	94-DMR-001772
	05/05/95	95-DMR-000617
36-41	08/15/94	

| TOTAL NUMBER OF PAGES: 42

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
TITLE PAGE	1
LIST OF EFFECTIVE PAGES.....	2
TABLE OF CONTENTS	3
1. PURPOSE	4
2. SCOPE	4
3. DEFINITIONS	5
4. RESPONSIBILITIES	7
4.1 Directors	7
4.2 Director, Organizational Effectiveness	8
4.3 Operations Manager	8
4.4 President or Designee	9
4.5 Principal Standing Order Administrator	9
4.6 Qualified Staff Member	9
4.7 Reviewing Organizations	9
4.8 Shift Order Administrator	10
4.9 Systems Engineering Manager	10
5. INSTRUCTIONS—PROGRAM IMPLEMENTATION	11
6. INSTRUCTIONS—STANDING ORDERS	13
6.1 Development, Approval, and Distribution of Standing Orders.....	13
6.2 Revision, Cancellation, and Maintenance of Standing Orders.....	17
7. INSTRUCTIONS—OPERATIONS ORDERS	19
7.1 Development, Approval, and Distribution of Operations Orders	19
7.2 Revision, Cancellation, and Maintenance of Operations Orders	28
8. INSTRUCTIONS—SHIFT ORDERS	30
8.1 Development, Approval, and Distribution of Shift Orders	30
8.2 Revision, Cancellation, and Maintenance of Shift Orders	32
9. RECORDS	33
10. REFERENCES	34
<u>Appendixes</u>	
Appendix 1, Operations Order Evaluation Checklist.....	35
Appendix 2, Authorized Reviewer Telephone List	38
Appendix 3, Standing Order Format.....	39
Appendix 4, Operations Order Format	40
Appendix 5, Shift Order Format	41

1. PURPOSE

This procedure describes the process for development and control of Standing, Shift, and Operations Orders to communicate essential directions from management to operations personnel in accordance with Department of Energy (DOE) Order 5480.19, Conduct of Operations Requirements for DOE Facilities. This procedure satisfies the requirement in the DOE Order for providing timely information and instructions to operators by establishing Shift Orders and Operations Orders.

2. SCOPE

This procedure applies to all EG&G Rocky Flats, Inc. employees and subcontractors involved with operations and support activities at the Rocky Flats Plant (RFP).

This procedure addresses the following topics:

- Development, approval, distribution, revision, cancellation, and maintenance of Standing Orders
- Development, approval, distribution, revision, cancellation, and maintenance of Operations Orders
- Development, approval, distribution, revision, cancellation, and maintenance of Shift Orders

This procedure applies only to new Standing, Shift, and Operations Orders. Those orders already in effect remain in effect until either revised, superseded (for reasons outside this procedure), canceled, or reach the expiration date.

This revision is a total rewrite and revision bars are omitted. This revision supersedes 1-31000-COOP-013. This revision is designated Revision 0 because the procedure number has been changed.

3. DEFINITIONS

Approved or Approval Date. The date of the Standing, Shift, or Operations Order that is signed by the President or Operations Manager, as appropriate, after requisite reviews and approvals have been obtained.

Effective Date. The date of the Standing, Shift, or Operations Order that is assigned by the President or Operations Manager, as appropriate, when the order will be implemented. This date may be the same as the approval date, or a later date to allow for distribution, training, or required reading of the order.

Expiration Date. The date of the Standing, Shift, or Operations Order that is assigned by the President or Operations Manager, as appropriate, when the order will expire. That date is not to exceed 12 mo after the effective date for Standing Orders and Technical Operations Orders, 3 mo after the effective date for Interim Operations Orders, 18 mo after the effective date for Administrative Operations Orders, and up to 30 days after the effective date for Shift Orders.

Issued or Date of Issue. Same as the approved or approval date.

Operations Order. A document that communicates timely instructions or directions from the Operations Manager to operations and other facility personnel. Operations Orders may contain technical instructions, administrative direction, administrative policy, administrative instruction, special operations, special evolutions and tests, operating experiences, industry-wide concerns, or emphasis on existing procedures.

- **Administrative Operations Order.** An Operations Order that is strictly administrative, based on an evaluation performed in accordance with Appendix 1, Operations Order Evaluation Checklist. Administrative Operations Orders have an effective duration of 18 months.

3. DEFINITIONS (continued)

Examples of Administrative Operations Orders include those written for the benefit of the building personnel to clarify and organize other orders and procedures. Although an Administrative Operations Order may have technical content, it remains only administrative in nature and does not allow for performance of physical work (such as valve and equipment operations or electrical line ups).

- **Interim Operations Order.** A Technical Operations Order issued by the Operations Manager before all of the external reviews are completed. The urgency of the Interim Operations Order is such that implementation is required for safety concerns before the review process is completed. The decision for the urgency rests with the Operations Manager.

The Interim Operations Order receives concurrence from a qualified staff member [a Subject-matter Expert (SME)] in addition to the Operations Manager before being issued.

The Interim Operations Order is effective upon the Operations Manager's approval. The order remains in effect until it is either canceled, 3 mo have elapsed, or the reviews have been completed, whereupon it becomes a Technical Operations Order.

- **Technical Operations Order.** An Operations Order that qualifies as having technical content based on an evaluation performed in accordance with Appendix 1. Technical Operations Orders require external review and have an effective duration of 12 mo unless otherwise specified.

Qualified Staff Member. An individual on the Operations Manager's staff whom the Operations Manager deems capable, competent, conscientious, and who is considered to have the expertise on the subject matter (an SME) to write or perform a technical review of an Interim Operations Order.

94-DNR-001772

3. DEFINITIONS (continued)

Shift Order. A document that communicates timely information that is pertinent for only a short time from the Operations Manager to the shift operations personnel. A short time is defined as overnight, over a long weekend, or over a holiday period, but not longer than 30 days. Information may include such items as impending procedure changes, equipment changes, or notification of work priorities, upcoming evolutions, and facility visits.

The difference between Shift Orders and Operations Orders is that Shift Orders convey information to personnel from shift-to-shift, and are effective for 30 days or less; whereas, Operations Orders convey administrative or technical instructions or directions and are effective for up to 18 mo and 12 mo, respectively.

Standing Order. A document issued by a responsible member of senior management that provides formally documented administrative guidance or instruction applicable to the site, until a permanent document is properly processed or until the administrative guidance or instruction is no longer appropriate. Standing Orders do not conflict with approved procedures and have effective periods not to exceed 12 months.

Telephone Concurrence (Telecon). Approval of a Standing, Shift, or Operations Order received by telephone.

4. RESPONSIBILITIES

4.1 **Director, Organizational Effectiveness**

Ensures that Standing and Operations Orders are reviewed for impact on formal classroom training.

Establishes a Standing Order Manual.

Designates a Principal Standing Order Administrator (PSOA) in writing.

95-DNR-100617

4.2 Directors

Publish a list of qualified reviewers for Technical Operations Orders, and distribute that list to all Operations Managers.

Periodically review existing Standing Orders for applicability.

Revise existing Standing Orders as determined by the President.

Ensure that Standing, Shift, and Operations Orders are reviewed for adherence to discipline-specific directives within the purview of the organization.

4.3 Operations Manager

Establishes a Standing Order Manual and Shift and Operations Orders Manual for designated building(s).

Designates a Shift Order Administrator (SOA) to administer the Standing Order Manual and Shift and Operations Orders Manual and the Operations Orders History File.

Prepares, or designates an individual to prepare, Operations Orders and Shift Orders.

Reviews and signs Operations Orders and Shift Orders.

Evaluates Operations Orders in accordance with Appendix 1, and designates the type of Operations Order.

Assigns a qualified staff member to review applicable Interim Operations Orders.

Reviews existing Operations Orders quarterly for applicability.

Cancel or revises existing Operations Orders and Shift Orders, as necessary.

Resolves comments, or designates an individual to resolve comments, for Operations Orders and Shift Orders that are in the review cycle.

4.4 President or Designee

Reviews and signs new Standing Orders.

Cancels or revises existing Standing Orders, as necessary.

4.5 Principal Standing Order Administrator

Maintains the Standing Orders Manual.

Establishes and maintains the Standing Orders History File.

Reviews the Standing Order Manual monthly for Standing Orders due to expire, and submits any order due to expire to the President or responsible Director to determine the need for revision or cancellation.

4.6 Qualified Staff Member

Reviews Interim Operations Orders for technical content and adherence to applicable regulations and procedures as determined by the Operations Manager.

Signs Appendix 1 to concur with an Interim Operations Order.

4.7 Reviewing Organizations

Conduct reviews of orders to ensure compliance with discipline specific requirements.

Perform conscientious and timely reviews of orders, using applicable 1-A01-PPG-001, Procedure Process; 1-A02-PPG-003, Procedure Writing; or 1-A03-PPG-004, Procedure Edit, Review, and Comment; for guidance.

Submit Review Comments Sheets, and resolve comments with originating organizations in a timely manner.

4.8 Shift Order Administrator

Maintains the Standing Order Manual and Shift and Operations Orders Manual as determined by the Operations Manager.

Establishes and maintains the Operations Orders History File as determined by the Operations Manager.

Establishes and maintains the Shift Orders History File as determined by the Operations Manager.

Distributes controlled copies of approved Standing, Shift, and Operations Orders.

Reviews the Shift and Operations Order Manual monthly for Operations Orders and Shift Orders due to expire, and submits the orders to the Operations Manager for review.

4.9 Systems Engineering Manager

Ensures that orders are reviewed by Engineering and Safety Services disciplines for compliance with applicable nuclear safety and technical requirements.

5. INSTRUCTIONS—PROGRAM IMPLEMENTATION

NOTE *It is not the intent of this procedure to extend the life of any order beyond the allowable time frame as described herein, without conversion to a procedure or policy as appropriate.*

Director, Organizational Effectiveness

- [1] Establish a Standing Orders Manual to include, as a minimum, a Table of Contents and all active Standing Orders.
- [2] Designate a PSOA to administer the Standing Orders Manual and the Standing Orders History File.

PSOA

- [3] Develop and maintain the Standing Orders Manual and the Standing Orders History File similar to the requirements for procedure history files in 1-A01-PPG-001.

Operations Manager

- [4] Establish a Standing Orders Manual and a Shift and Operations Orders Manual to include, as a minimum, a Table of Contents and all active Standing, Shift, and Operations Orders.
- [5] Designate an SOA to administer the Standing Orders Manual and the Shift and Operations Orders Manual and the Operations Orders and Shift Orders History Files.

SOA

- [6] Develop and maintain a Shift and Operations Orders Manual and the Operations Order and Shift Order History Files similar to the requirements for procedure history files in 1-A01-PPG-001.
- [7] Administer a Standing Order Manual for the operational area.

5. INSTRUCTIONS—PROGRAM IMPLEMENTATION (continued)

Directors

- [8] Promulgate by official memorandum, a list of qualified reviewers and supervisors within the organization available for Technical Operations Orders review.

Appendix 2, Authorized Reviewer Telephone List, is a sample format to use when developing the list of qualified reviewers.

- [9] Include telephone numbers in the list of qualified reviewers so that Operations Managers may be able to contact a reviewer or supervisor expeditiously.
- [10] Distribute the list of qualified reviewers to all Operations Managers.
- [11] Update and distribute changes to the list of qualified reviewers as required to maintain currency.

Systems Engineering Manager

- [12] Route orders received to the appropriate Engineering and Safety Services disciplines for review to ensure compliance with applicable safety basis documents, such as EOE's, JCO's, or USQDs, or with applicable nuclear safety or technical requirements.

95-DMR-000617

6. INSTRUCTIONS—STANDING ORDERS

This section describes the process for development, review, approval, distribution, revision, cancellation, and maintenance of Standing Orders.

6.1 Development, Approval, and Distribution of Standing Orders

President or Director

- [1] Identify and determine the need for a Standing Order.
- [2] Prepare the Standing Order using the format in Appendix 3, Standing Order Format.

NOTE *The sequential number is obtained from the PSOA.*

- [A] Label the header with a unique identifier that includes the following:

- Number: ZZ is the sequential number.

For example, Standing Order No.: 01.

- Revision level
- Effective date
- Expiration date
- Page numbers

NOTE *1-A02-PPG-003 has guidance for writing style and standardization.*

- [B] Include the following mandatory sections in the Standing Order:

- Purpose
- Scope and Applicability
- Directions, Instructions, and Information

6.1 Development, Approval, and Distribution of Standing Orders (continued)

[C] IF these sections will clarify the Standing Order,
THEN include any or all sections, as appropriate:

- Definitions
- Responsibilities
- References
- Attachments (forms, lists, checklists, examples; but not instructions or action steps)

[3] Route the Standing Order to the following reviewing organizations for review and concurrence, as required:

- Organizations that have interest or responsibilities and tasks assigned
- Legal

[4] IF an emergency situation arises requiring the issuance of a Standing Order, THEN issue a Standing Order valid for 72 hr with concurrences as deemed necessary.

NOTE *If during the review of an already implemented Standing Order, a review organization determines that a significant quality concern exists, the concern is processed in accordance with 1-F74-ADM-16.17, Deficient Condition Report and Corrective Action System.*

Reviewing Organizations

- [5] Review the Standing Order for consistency and compliance with existing internal and external RFP documents.
- [6] Route all comments against the Standing Order to the PSOA.

PSOA

- [7] Resolve comments with each reviewer in accordance with 1-A03-PPG-004.
- [8] Create a Standing Order History File in accordance with 1-A01-PPG-001.

95-DMR-000617

6.1 Development, Approval, and Distribution of Standing Orders (continued)

[9] Prepare the final draft of the Standing Order.

[10] Deleted.

[11] **IF** the Standing Order is intended to be a temporary document to meet a procedural need,
THEN prepare and process a Document Modification Request (DMR) in accordance with 1-A01-PPG-001, to have a developed or modified procedure approved in time to replace the Standing Order within 12 mo of the effective date of the order.

[12] **IF** a Standing Order specifies how requirements are met, or how an activity is to be performed,
THEN prepare Appendix 3, Procedures Requiring ORC Review, of 1-52000-ADM-02.01, Operations Review Committee Requirements, to determine if the Standing Order requires Operations Review Committee (ORC) review.

[13] **IF** the results of preparation of Appendix 3 of 1-52000-ADM-02.01 for a Standing Order indicate that the Standing Order meets the criteria for ORC review,
THEN submit the Standing Order to the ORC for review.

[14] Submit the Standing Order, with a copy of the PAR or DMR, as appropriate, to the President for approval.

President

[15] Review and sign the Standing Order.

The President may designate an individual or organization to sign a Standing Order for implementation at RFP.

6.1 Development, Approval, and Distribution of Standing Orders (continued)

NOTE *An effective date is assigned that is either the same day as the approval date, or a future date to allow for distribution, training, and required reading of the order.*

[16] Assign an effective date to the Standing Order.

NOTE *The expiration date is normally 12 mo from the effective date of a Standing Order.*

[17] Assign an expiration date not to exceed 12 mo from the effective date.

[18] Route the Standing Order to the PSOA for processing and distribution.

PSOA

[19] File the master copy of the Standing Order in the Standing Orders Manual.

[20] Complete and maintain the Standing Order History File.

[21] Provide a reproducible copy of the Standing Order and the revised Table of Contents to Document Control for dissemination of controlled copies to the following:

- Directors
- SOAs
- Others on the distribution list

6.2 Revision, Cancellation, and Maintenance of Standing Orders

This section provides instructions for revising, canceling, reviewing, and otherwise maintaining the current effective Standing Orders.

Director

- [1] IF due to events or circumstances a Standing Order is no longer necessary,
THEN:

- [A] Request that the PSOA submit the existing master copy of the Standing Order to the President for cancellation and any applicable documents supporting the cancellation of the order.

PSOA

- [B] Submit the master copy to the President with supporting documentation for the cancellation.

President or Designee

- [C] Record the following on the master copy:
- A diagonal line across the Title Page
 - *CANCELED*
 - Signature
 - Date of the entry

- [D] Return the master copy as marked for cancellation to the PSOA.

PSOA

- [E] Update the Table of Contents in the Standing Order Manual to reflect the cancellation and date of the cancellation.
- [F] Provide a revised Table of Contents of the Standing Order Manual to Document Control for distribution to controlled copyholders of the Standing Order Manual.
- [G] Include the master copy of the canceled Standing Order in the Standing Order History File.

6.2 Revision, Cancellation, and Maintenance of Standing Orders (continued)

Director

- [2] **IF** a Standing Order requires rewriting,
THEN:

[A] Revise the Standing Order.

PSOA

- [B] Prepare and issue the revised Standing Order in accordance with Section 6.1, Development, Approval, and Distribution of Standing Orders.
- [C] Record in the Scope section that the revision supersedes the current Standing Order.
- [D] Update the Table of Contents in the Standing Order Manual after the Standing Order is issued, to reflect the revision and the date of the revision.
- [E] Provide the revised Table of Contents and the Standing Order revision to Document Control for distribution to the controlled copyholders on the distribution list.
- [F] Notify Document Development Services to revise any DMR in process in accordance with the latest Standing Order revision.
- [3] Review the Standing Order Manual monthly to identify those Standing Orders that are outdated or due to expire in the following month.
- [4] Submit a list of the outdated or expiring orders to the President and the responsible Directors for review.

President or Director

- [5] Review the Standing Orders that are outdated or expiring.
- [6] Cancel or revise the outdated or expiring orders in accordance with this section, as appropriate.

94-DMR-002083

7. INSTRUCTIONS—OPERATIONS ORDERS

This section describes the process for development, review, approval, distribution, revision, cancellation, and maintenance of Operations Orders. Included are instructions for Administrative, Interim, and Technical Operations Orders.

7.1 Development, Approval, and Distribution of Operations Orders

The need for an Operations Order may be identified by any member of the organization.

Operations Manager

- [1] Determine the identified need for an Operations Order.

NOTE *Operations Orders are not issued as substitutes for any procedures to control routine safety-related or safety-impacted work activities.*

- [2] Ensure that Operations Orders are not issued as a substitute for procedures to control routine safety-related or safety-impacted work activities.

- [3] Prepare the Operations Order using the format in Appendix 4, Operations Order Format.

NOTE *The sequential number is obtained from the SOA.*

- [A] Label the header with a unique identifier that includes the following:

- Number: OO is the Operations Order.
 XXX is the building number (707, 771).
 ZZ is the sequential number.
- Revision level
- Effective date
- Expiration date
- Page numbers

7.1 Development, Approval, and Distribution of Operations Orders (continued)

NOTE *1-A02-PPG-003 has guidance for writing style and standardization.*

[B] Include the following mandatory sections in the Operations Order:

- Purpose
- Scope and Applicability
- Directions, Instructions, and Information

[C] **IF** these sections clarify the Operations Order,
THEN include any or all sections, as appropriate:

- Definitions
- Prerequisites
- Precautions
- Responsibilities
- References
- Attachments (forms, lists, checklists, examples; but not instructions or action steps)
- Training

[D] **IF** the Operations Order is intended to be a temporary document to meet a continuing procedural need,
THEN:

[a] Check (✓) the Convert-to-Procedure box on the Title Page.

NOTE *Conversion of an Operations Order to a procedure is to be completed within 12 mo of the effective date of the order.*

[b] Generate a DMR in accordance with 1-A01-PPG-001.

[E] List on the Title Page the groups that are required to read the Operations Order.

7.1 Development, Approval, and Distribution of Operations Orders (continued)

- [4] Complete Appendix 1.

Appendix 1 is used to determine if an Operations Order is Administrative or Technical; and if it is a Technical Operations Order, whether it is an Interim Operations Order.

- [5] **IF** the Operations Order is determined to be Administrative,
THEN:

[A] Mark *N/A* in the Interim Operations Order box in Appendix 1.

[B] Check (✓) the Administrative box in the Category list on the Operations Order.

NOTE *If during the review of an already implemented Administrative Operations Order, a review organization determines that a significant quality concern exists, the concern is processed in accordance with 1-F74-ADM-16.17.*

[C] Deliver one copy of the Administrative Operations Order to the following organizations within 24 hr for information only:

- Industrial Health and Safety
- Quality Program
- Systems Engineering
- Nuclear Safety Engineering

- [6] **IF**, based on the Appendix 1 evaluation, the Operations Order is determined to be Technical,
THEN:

[A] Check (✓) the Technical box in the Category list on the Operations Order.

[B] Determine if the need for an Operations Order is urgent enough that it is to be implemented before the review cycle is completed.

7.1 Development, Approval, and Distribution of Operations Orders (continued)

NOTE *Situations requiring urgent action through an Interim Operations Order to mediate concerns, such as safety, criticality, safeguards, or security, require coordination with the appropriate disciplines.*

[7] **IF** the Operations Order is an Interim Operations Order, such that it is urgently needed,

THEN:

[A] Mark *YES* in the Interim Operations Order box in Appendix 1.

[B] Check (✓) the Interim box in the Category list on the Operations Order.

[C] Assign a qualified member of the building staff to review the order.

The staff member may also be the originator.

[D] Ensure that coordination is established with representatives of disciplines, in accordance with Appendix 1, who are responsible for the areas that address the concerns causing the Interim Operations Order to be issued.

Qualified Staff Member

[E] Review the Operations Order, and resolve any comments.

[F] Sign Appendix 1 and the Operations Order (telecon may be obtained).

Operations Manager

[G] Review and approve by signing Appendix 1.

[H] Review and approve by signing the Operations Order (telecon may be obtained).

[I] Assign an effective date.

[J] Record *INTERIM* in the Expiration Date blank on the Operations Order.

7.1 Development, Approval, and Distribution of Operations Orders (continued)

[K] Deliver a copy of the Interim Operations Order to the following disciplines within 24 hr of issuance of the order for review:

[a] For non-nuclear safety related Technical Operations Orders:

- Industrial Health and Safety (only required for non-nuclear safety issues)
- Engineering (technical staff assigned to the affected facility or as assigned by the Systems Engineering Manager)

[b] For Technical Operations Orders that may impact the authorization basis:

- Nuclear Safety Engineering
- Engineering (technical staff assigned to the affected facility or as assigned by the Systems Engineering Manager)

Existing, approved safety basis documents such as EOE's, USQDs, or JCOs, may be used as a basis for content and approval of Technical Operations Orders. Only Engineering concurrence is required to ensure appropriate implementation of technical requirements (such as compensatory measures specified by an EOE or USQD) when approved safety basis documents exist. An SES or USQD is required, unless otherwise determined by Nuclear Safety Engineering, when safety basis documents do not exist.

[L] Issue the Interim Operations Order.

[8] IF the Operations Order is NOT urgently needed,
THEN mark NO in the Interim Operations Order box in Appendix 1.

[9] Determine the organizations necessary to review the order.

95-DMR-000617

7.1 Development, Approval, and Distribution of Operations Orders (continued)

SOA

[10] Assemble the review packages with the contents to include:

- Transmittal notice, including the date for comment return.
- Draft of the proposed Technical or Interim Operations Order.
- Blank Review Comment Sheets (Appendix 6, Review Comment Sheet, of 1-A03-PPG-004).

NOTE *To expedite the review process, the Operations Manager may contact the cognizant reviewers in each organization as specified in the lists of qualified reviewers provided by the Directors.*

[11] Route the order to the following disciplines for parallel review and concurrence:

[A] For non-nuclear safety related Technical Operations Orders:

- Industrial Health and Safety (only required for non-nuclear safety issues)
- Engineering (technical staff assigned to the affected facility or as assigned by the Systems Engineering Manager)

[B] For Technical Operations Orders that may impact the authorization basis:

- Nuclear Safety Engineering
- Engineering (technical staff assigned to the affected facility or as assigned by the Systems Engineering Manager)

Existing, approved safety basis documents such as EOE, USQDs, or JCOs, may be used as a basis for content and approval of Technical Operations Orders. Only Engineering concurrence is required to ensure appropriate implementation of technical requirements (such as compensatory measures specified by an EOE or USQD) when approved safety basis documents exist. An SES or USQD is required, unless otherwise determined by Nuclear Safety Engineering, when safety basis documents do not exist.

95-DMR-000619

7.1 Development, Approval, and Distribution of Operations Orders (continued)

The Operations Order may be routed either through site mail, facsimile transmission (with hard-copy backup), hand-delivered, or any other method, based on the degree of urgency that the order is needed.

[12] **IF** review personnel are **NOT** available, due to weekend or backshift work, **AND** the review **CANNOT** wait until such personnel are onsite, **THEN** refer to the list of qualified reviewers provided by the Directors to contact SMEs or supervisors by telephone to perform the review.

[13] **IF**, based on the Appendix 1 evaluation, additional review is required, **THEN** route the order to the following additional disciplines for parallel review:

- Nuclear Materials Safeguards
- Radiological Engineering
- Radiological Operations
- Traffic

NOTE 1 *The Operations Order is reviewed in a timely manner, defined herein as 5 working days from the time of receipt of the order to the time of return to the originating Operations Manager.*

NOTE 2 *Section 9, Parallel Review, of 1-A03-PPG-004, provides guidance in performing the discipline-specific review.*

Reviewing Organization

[14] Review the Operations Order.

[15] **IF** there are no comments to be made,
THEN:

[A] Sign the Review Comments Sheet with *NONE* indicated.

[B] Return the Transmittal Package to the responsible Operations Manager.

7.1 Development, Approval, and Distribution of Operations Orders (continued)

[16] IF there are comments to be made,
THEN document all comments on the Review Comments Sheets as follows:

[A] IF there are General comments,
THEN limit the comments to:

- Editorial corrections.
- Questions on procedure content.
- Technical preferences with a reason (such as clarity, conformity, and consistency).

[B] IF there are Mandatory comments,
THEN include an explanation on the Review Comments Sheet that includes:

- Specified requirements from the source document, including the section and page number, as requested.
- Technical information to meet the needs of the reviewer's organization.
- Suggested word-for-word alternatives.

[C] Sign the Review Comments Sheet(s).

[D] Expeditiously return the Review Comments Sheet(s) to the responsible Operations Manager.

Operations Manager

[17] Resolve comments with each reviewer in accordance with Section 11.2 of 1-A03-PPG-004.

7.1 Development, Approval, and Distribution of Operations Orders (continued)

NOTE *Telecon may be obtained during the comment resolution process, and such use recorded on the Review Comment Sheets.*

[18] **IF** the Operations Order is modified during the comment resolution process,
THEN perform one of the following:

[A] Route the revised order in accordance with this section for final review and signature.

[B] Sign as provided by the telecon.

NOTE *If during the review of an already implemented Interim Operations Order, a review organization determines that a significant quality concern exists, the concern is processed in accordance with 1-F74-ADM-16.17.*

[19] **IF** an Interim Operations Order is already implemented, and is to be modified based on the reviewer's comments,
THEN issue a revision to the Interim Operations Order in accordance with this section.

SOA

[20] Assemble all Review Comments Sheets with signatures in the Operations Order History File.

[21] **IF** an Operations Order defines detailed steps for performing an activity or operation,
THEN prepare Appendix 3 of 1-52000-ADM-02.01 to determine if the Operations Order requires ORC review.

[22] **IF** the results of preparation of Appendix 3 of 1-52000-ADM-02.01 for an Operations Order indicate that the Operations Order meets the criteria for ORC review,
THEN submit the Operations Order to the ORC for review.

7.1 Development, Approval, and Distribution of Operations Orders (continued)

Operations Manager

[23] Sign the Operations Order.

NOTE *An effective date is assigned that is either the same day as the approval date, or a future date to allow for distribution, training, and required reading of the order.*

[24] Assign an effective date to the Operations Order.

NOTE *The expiration date is normally 18 mo from the effective date of an Administrative Operations Order, and 12 mo from the effective date of a Technical Operations Order.*

[25] Assign an expiration date.

[26] Route the Operations Order to the SOA for processing and distribution..

SOA

[27] File the master copy of the Operations Order in the Shift and Operations Order Manual.

[28] Issue controlled copies of the Operations Order and the revised Table of Contents to those on the distribution list.

[29] Deliver one copy of the Operations Order to Organizational Effectiveness to assess the impact on training programs.

Director, Organizational Effectiveness

[30] Ensure that the Operations Order is reviewed for impact on formal classroom training.

[31] Revise formal classroom training, as required, to accommodate the information contained in the Operations Order.

7.2 Revision, Cancellation, and Maintenance of Operations Orders

This section provides instructions for revising, canceling, reviewing, and otherwise maintaining the current effective Operations Orders.

Operations Manager

- [1] **IF** due to events or circumstances an Operations Order is no longer necessary,
THEN:

- [A] Cancel the existing Operations Order.
- [B] Record the following on the master copy:
 - A diagonal line across the Title Page
 - *CANCELED*
 - Signature
 - Date of the entry

SOA

- [C] Update the Table of Contents in the Shift and Operations Order Manual to reflect the cancellation and date of the cancellation.
- [D] Distribute a revised Table of Contents to the controlled copyholders of Shift and Operations Order Manuals.
- [E] Notify the controlled copyholders on the distribution list to destroy the copies of the canceled Operations Order.

Operations Manager

- [2] **IF** it is determined that an Operations Order requires rewriting,
THEN revise the Operations Order as follows:
- [A] **IF** the order is an Administrative, Technical, or Interim Operations Order,
THEN prepare and issue the revised Operations Order in accordance with Section 7.1, Development, Approval, and Distribution of Operations Orders.
 - [B] Record in the Scope section that this revision supersedes the current Operations Order.

7.2 Revision, Cancellation, and Maintenance of Operations Orders (continued)

SOA

- [C] Update the Table of Contents in the Shift and Operations Order Manual after the Operations Order is issued to reflect the revision, and date of the revision.
- [D] Distribute the revised Table of Contents and the Operations Order revision to the controlled copyholders on the distribution list.
- [E] Notify the controlled copyholders to destroy the superseded copies.
- [3] Review the Shift and Operations Order Manual monthly to identify those Operations Orders that are outdated or due to expire in the following month.
- [4] Submit a list of the outdated or expiring orders to the Operations Manager for review.

Operations Manager

- [5] Review the Shift and Operations Orders that are outdated or expiring.
- [6] Cancel, revise, or incorporate into a procedure, the outdated or expiring orders in accordance with this section, as appropriate.

8. INSTRUCTIONS—SHIFT ORDERS

This section describes the process for development, review, approval, distribution, revision, cancellation, and maintenance of Shift Orders.

8.1 Development, Approval, and Distribution of Shift Orders

Operations Manager

- [1] Identify and determine the need for a Shift Order.
- [2] Prepare the Shift Order using the format in Appendix 5, Shift Order Format.

NOTE *The sequential number is obtained from the SOA.*

[A] Label the header with a unique identifier that includes the following:

- Number: XXX is the building number.
 YY is the year.
 ZZ is the sequential number.
- Revision level
- Effective date
- Expiration date
- Page numbers

[B] Complete the following sections, as appropriate, for the order:

- Shift Operations
- Shift Information
- Shift Training Activities

- [3] Review and sign the Shift Order (telecon may be obtained).

NOTE *An effective date is assigned that is either the same day as the approval date, or a future date to allow for distribution, training, and required reading of the order.*

- [4] Assign an effective date to the Shift Order.

8.1 Development, Approval, and Distribution of Shift Orders (continued)

NOTE *The expiration date for a Shift Order is 30 days or less from the effective date.*

[5] Assign an expiration date.

[6] Route the Shift Order to the SOA for processing and distribution.

SOA

[7] File the master copy of the Shift Order in the Shift and Operations Order Manual.

[8] Issue controlled copies of the Shift Order and the revised Table of Contents to those on the distribution list.

NOTE *If during the review of an already implemented Shift Order, a review organization determines that a significant quality concern exists, the concern is processed in accordance with 1-F74-ADM-16.17.*

[9] Deliver one copy of the Shift Order to the following organizations within 24 hr for information only:

- Industrial Health and Safety
- Quality Program
- Systems Engineering
- Nuclear Safety Engineering

Operations Manager

[10] **IF** a Shift Order is already implemented, and is to be modified based on the reviewer's comments,

THEN issue a revision to the Shift Order.

SOA

[11] Assemble all Review Comments Sheets with signatures in the Shift Order History File.

8.2 Revision, Cancellation, and Maintenance of Shift Orders

This section provides instructions for revising, canceling, reviewing, and otherwise maintaining the current effective Shift Orders.

Operations Manager

- [1] IF due to events or circumstances a Shift Order is no longer necessary,
THEN:

- [A] Submit the existing Shift Order to the Operations Manager for cancellation.
- [B] Record the following on the master copy:
 - A diagonal line across the Title Page
 - *CANCELED*
 - Signature
 - Date of the entry

SOA

- [C] Update the Table of Contents in the Shift and Operations Order Manual to reflect the cancellation and date of the cancellation.
- [D] Distribute a revised Table of Contents to the controlled copyholders of Shift and Operations Order Manuals.
- [E] Notify the controlled copyholders on the distribution list to destroy the copies of the canceled Shift Order.

Operations Manager

- [2] IF it is determined that a Shift Order requires rewriting,
THEN revise the Shift Order as follows:

- [A] Prepare and issue the Shift Order in accordance with Section 8.1, Development, Approval, and Distribution of Shift Orders.

8.2 Revision, Cancellation, and Maintenance of Shift Orders (continued)

SOA

- [B] Update the Table of Contents in the Shift and Operations Order Manual after the Shift Order is issued, to reflect the revision, and the date of the revision.
- [C] Distribute the revised Table of Contents and the Shift Order revision to the controlled copyholders on the distribution list.
- [D] Notify the controlled copyholders to destroy the superseded copies.
- [3] Review the Shift and Operations Order Manual monthly to identify those Shift Orders that are outdated or due to expire in the following month.
- [4] Submit a list of the outdated or expiring orders to the Operations Manager for review.

Operations Manager

- [5] Review the Shift Orders that are outdated or expiring.

NOTE *If the original version of a Shift Order is still applicable, the order may be extended by changing the revision level and processing the order through the same approval cycle as the original version.*

- [6] Cancel or revise the outdated or expiring orders in accordance with this section, as appropriate.

9. RECORDS

The following Quality Assurance Records are generated by this procedure:

- Operations Order Evaluation Checklists
- Standing Orders
- Standing Order History Files
- Operations Orders
- Operations Order History Files
- Shift Orders

9. **RECORDS (continued)**

- Shift Order History Files
- Standing Orders Manual
- Shift and Operations Orders Manual

PSOA

- [1] Maintain Quality Assurance Records for Standing Orders in accordance with 1-77000-RM-001, Records Management Guidance for Records Sources.

SOA

- [2] Maintain Quality Assurance Records for Shift and Operations Orders in accordance with 1-77000-RM-001.

10. **REFERENCES**

DOE Order 5480.19, Conduct of Operations Requirements for DOE Facilities

1-A01-PPG-001, Procedure Process

1-A02-PPG-003, Procedure Writing

1-A03-PPG-004, Procedure Edit, Review, and Comment

1-F74-ADM-16.17, Deficient Condition Report and Corrective Action System

1-50000-ADM-05.02, Development and Control of Rocky Flats Plant Policies

1-52000-ADM-02.01, Operations Review Committee Requirements

1-77000-RM-001, Records Management Guidance for Records Sources

APPENDIX 1

Page 1 of 3

OPERATIONS ORDER EVALUATION CHECKLIST

Operations Order No.: _____ Revision No.: _____
Title: _____
Originator: _____ Ext./Pgr.: _____ / _____ Bldg.: _____

- NOTE 1** *This checklist is used to determine if a proposed Operations Order is an Administrative Operations Order or a Technical Operations Order.*
- NOTE 2** *Additionally, if the Operations Order is determined to be a Technical Operations Order, an evaluation is made to determine whether it is an Interim Operations Order.*
- NOTE 3** *The Operations Manager determines if the Technical Operations Order is urgent enough to issue before the review cycle is completed. If so, it is assigned to a qualified member of the building staff (an SME) to review the Operations Order for technical content, and then the Operations Manager also reviews and signs the Operations Order.*

BASIC CHECKLIST

This section determines if the four basic organizations listed below are required to review the proposed Operations Order.

If the answer to any of the questions in this section is YES, or if any question in the Extended Checklist is YES (even if all of the questions in this section are answered NO), then this is a Technical Operations Order, and these disciplines are required to review the order.

- [A] For non-nuclear safety related Technical Operations Orders (only question 4 is checked YES):
- Industrial Health and Safety (only required for non-nuclear safety issues)
 - Engineering (technical staff assigned to the affected facility or as assigned by the Systems Engineering Manager)
- [B] For Technical Operations Orders that may impact the authorization basis (questions 1, 2, 3, or 5 or the extended checklist is checked YES):
- Nuclear Safety Engineering
 - Engineering (technical staff assigned to the affected facility or as assigned by the Systems Engineering Manager)

Existing, approved safety basis documents such as EOE, USQDs, or JCOs, may be used as a basis for content and approval of Technical Operations Orders. Only Engineering concurrence is required to ensure appropriate implementation of technical requirements (such as compensatory measures specified by an EOE or USQD) when approved safety basis documents exist. An SES or USQD is required, unless otherwise determined by Nuclear Safety Engineering, when safety basis documents do not exist.

95-DMR-000617

APPENDIX 1

Page 2 of 3

	YES	NO
1. Could the proposed Operations Order impact personnel or public safety?	<input type="checkbox"/>	<input type="checkbox"/>
2. Could the proposed Operations Order impact the environment?	<input type="checkbox"/>	<input type="checkbox"/>
3. Could the proposed Operations Order impact nuclear safety or the safety envelope?	<input type="checkbox"/>	<input type="checkbox"/>
4. Does the proposed Operations Order provide procedural steps for manipulation of plant equipment?	<input type="checkbox"/>	<input type="checkbox"/>
5. Does the proposed Operations Order describe handling, processing, use, storage, transfer, measurement, or inventory of nuclear material, the nuclear criticality system, or Nuclear Material Safety Limit (NMSL)/Criticality Safety Operating Limit (CSOL)?	<input type="checkbox"/>	<input type="checkbox"/>

EXTENDED CHECKLIST

This section determines if any additional reviews are required. If any of these questions are answered YES, then that respective discipline also reviews the Operations Order. If all of the questions from the Basic Checklist were answered NO, but one or more questions in this section are YES, then the four basic organizations review the Operations Order.

- | | | |
|---|--------------------------|--------------------------|
| 6. Does the proposed Operations Order direct the movement of Special Nuclear Material (SNM) or other fissile or nonfissile radioactive materials? | <input type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|

If YES, Nuclear Materials Safeguards, Radiological Engineering, and Traffic are required to review the proposed Operations Order.

APPENDIX 1

Page 3 of 3

- | | YES | NO |
|---|--------------------------|--------------------------|
| 7. Does the proposed Operations Order alter or reconfigure any system or component that either mitigates the consequences of a radiological accident, or monitors or operates any radiological system or process? | <input type="checkbox"/> | <input type="checkbox"/> |

If YES, Radiological Engineering is required to review the proposed Operations Order.

- | | | |
|---|--------------------------|--------------------------|
| 8. Does the proposed Operations Order monitor or survey for radiological contamination, or have the potential to breach any system or component that has the potential to release radioactive material? | <input type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|

If YES, Radiological Operations is required to review the proposed Operations Order.

CATEGORIZATION

Operations Order issued as a(n)

_____ Administrative
_____ Technical

	YES	NO	N/A
If Technical, Interim Operations Order?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If YES, qualified staff member's and Operations Manager's signatures are required.

If NO or N/A, only the Operations Manager's signature is required.

_____/	_____/
Staff Member	Date

_____/	_____/
Operations Manager	Date

APPENDIX 2
Page 1 of 1

AUTHORIZED REVIEWER TELEPHONE LIST

NOTE *This list contains the names and contact numbers of those personnel authorized to review Technical Operations Orders for*
(Director Organization)

SUBJECT MATTER EXPERTS

<u>NAME</u>	<u>SUBJECT(S)</u>	<u>PHONE # WORK/HOME</u>	<u>PAGER</u>	<u>SUPERVISOR</u>
JOHN DOE	RCRA/HAZMAT	1234/555-1111	D-0101	JANE DOE
ZEZE DOE	HSP 31.11	1111/555-0000	D-9919	KIKI DOE

SUPERVISORS

<u>NAME</u>	<u>PHONE # WORK/HOME</u>	<u>PAGER</u>	<u>SUPERVISOR</u>
JANE DOE	0000/555-2222	D-1Q11	BEBE DOE
KIKI DOE	0001/555-3333	D-11Z1	BEBE DOE

MANAGERS

<u>NAME</u>	<u>PHONE # WORK/HOME</u>	<u>PAGER</u>	<u>SUPERVISOR</u>
BEBE DOE	9999/555-8888	D-6666	S.S. SMITH

DIRECTOR/PRESIDENT

<u>NAME</u>	<u>PHONE # WORK/HOME</u>	<u>PAGER</u>	<u>SUPERVISOR</u>
S.S. SMITH	8888/555-4444	D-0000	H. MANN
H. MANN	7777/555-5555		

APPENDIX 3

Page 1 of 1

STANDING ORDER FORMAT

Standing Order No: _____
Revision: _____
Effective Date: _____
Expiration Date: _____
Page: ____ of ____

SUBJECT _____
Title

Purpose:

Scope and Applicability:

Directions, Instructions, and Information:

Approved by: _____ / _____
President Date

APPENDIX 4

Page 1 of 1

OPERATIONS ORDER FORMAT

PLUTONIUM PRODUCTION
OPERATIONS ORDERS

Number: _____
Revision: _____
Effective Date: _____
Expiration Date: _____
Page: ____ of ____

Category: ☐ Administrative ☐ Technical ☐ Interim

Approved By: _____/Date: _____
Operations Manager

☐ Convert to Procedure (by _____) _____
date Assigned Manager

NOTE \ If this box is marked, the assigned manager has the responsibility to see that a procedure is drafted, approved, and issued before expiration of the Operations Order.

☐ Required Reading Files: _____
Indicate additional distribution

PURPOSE:

SCOPE AND APPLICABILITY: This Operations Order applies to:

DIRECTIONS, INSTRUCTIONS, and INFORMATION:

REVIEWED FOR CLASSIFICATION

BY: _____

DATE: _____

APPENDIX 5

Page 1 of 1

SHIFT ORDER FORMAT

		Shift Order No: _____
		Revision: _____
		Effective Date: _____
		Expiration Date: _____
		Page: _____ of _____
SUBJECT: _____		
		Title
Shift Operations:		
Shift Information:		
Shift Training Activities:		
SAMPLE		
Approved By: _____		_____
Operations Manager		Date
		Facility

Rocky Flats Plant 1-31000-COOP-014

REVISION 0

INDEPENDENT VERIFICATION

APPROVED BY: [Signature] 16/30/92
General Manager, Date
Rocky Flats Plant

Responsible Organization: Plutonium Production

Effective Date: 07/15/92

CONCURRENCE:

[Signature] 16/26/92
Assistant General Manager, Date
Administration and Planning

[Signature] 16/26/92
Associate General Manager, Date
Environmental and Waste Management

[Signature] 16/26/92
Assistant General Manager, Date
Non-Plutonium Operations

[Signature] 16/26/92
Assistant General Manager, Date
Performance-Based Training

[Signature] 16/26/92
Assistant General Manager, Date
Plutonium Recovery

[Signature] 6/26/92
Assistant General Manager, Date
Quality Assurance

[Signature] 6/29/92
Assistant General Manager, Date
Technical Support

[Signature] 16/30/92
Operations Review Committee Chairman Date

[Signature] 16/26/92
Assistant General Manager, Date
Engineering

[Signature] 16-26-92
Assistant General Manager, Date
Health and Safety

[Signature] 6/29/92
Assistant General Manager, Date
Performance Assurance

[Signature] 6/26/92
Assistant General Manager, Date
Plutonium Production

[Signature] 6/30/92
Assistant General Manager, Date
Program and Project Management

[Signature] 16/26/92
Assistant General Manager, Date
Radiation Protection

[Signature] 6/30/92
Subject Matter Expert Date

AFFECTS PLANT SAFETY PROCEDURE USE CATEGORY 3

The following PRRs have been incorporated in this revision:
92-PRR-000230

Reviewed for Classification

By [Signature] UNA

Date 6/30/92

This procedure supersedes procedure COOP-014, Revision 1.

PADC-92-00631

CONTROLLED COPY

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
TITLE	1
TABLE OF CONTENTS	2
1. PURPOSE	3
2. SCOPE	3
3. DEFINITIONS	3
4. RESPONSIBILITIES	3
4.1 Operations Manager (OM)	3
4.2 Shift Manager (SM)	4
4.3 Personnel Performing IV	5
5. INSTRUCTIONS	6
5.1 Personnel Training	6
5.2 Systems and Components Requiring IV	6
5.3 Conditions Requiring IV	7
5.4 Routine Conditions Not Requiring IV	10
5.5 Verification Techniques	11
5.5.1 Valves	11
5.5.2 Circuit Breakers	13
5.6 IV Guidelines	14
6. RECORDS	17
7. REFERENCES	17
<u>Appendices</u>	
Appendix 1, Independent Verification Flowchart	19
Appendix 2, Sample Independent Verification Alignment Checklist ..	20

1. PURPOSE

- 1.1 This procedure describes administrative controls to perform Independent Verification (IV) for components and system alignment.

2. SCOPE

- 2.1 This procedure defines the components and the conditions requiring, or not requiring, IV. Techniques and guidelines for performing IV are also included.
- 2.2 This procedure may be used in conjunction with other approved operating procedures where system IV lineups are specified and may be used to supplement procedures that do not contain specific IV instructions.

3. DEFINITIONS

- 3.1 Independent Verification. The act of checking a condition, such as a component position, separately from activities related to establishing the condition or the component's position.
- 3.2 Double Verification. The process by which two individuals simultaneously verify that an action is correct or has been accomplished or that a position or condition is in a certain state or status. Except as stated in Step 5.5.1.3.2, Double Verification is not an acceptable alternative to required IV.

4. RESPONSIBILITIES

4.1 Operations Manager (OM)

- 4.1.1 Ensures building-specific lists of systems and conditions requiring IV are developed, approved, and distributed to locations where the IV activities are performed.

- 4.1.2 Provides IV training which includes on-the-job training in techniques and methods to be used.
- 4.1.3 Reports completion of training to Performance-Based Training for documentation in Plant Training Records in accordance with 1-10000-TUM, Training Users Manual.
- 4.1.4 Ensures only personnel who have received IV training perform required IV tasks.
- 4.1.5 Reviews Lessons Learned reports, Occurrence Reports, Deficiency Reports, logs, and similar reports and documents to determine if additional systems, components, or situations are subject to IV requirements.

4.2 Shift Manager (SM)

- 4.2.1 Ensures IVs are performed when specified or required.
- 4.2.2 Ensures personnel assigned to perform IV have received training in the techniques and methods to be used.
- 4.2.3 Initiates IV when considered necessary to ensure a system or component is properly aligned.
- 4.2.4 Resolves discrepancies associated with performing IV tasks.
- 4.2.5 Reviews completed Independent Verification Alignment Checklists for accuracy and completeness.

4.3 Personnel Performing IV

- 4.3.1 Perform IV in accordance with the methods and techniques described in this procedure and the training received.
- 4.3.2 Ensure SM is notified of any discrepancies encountered while performing IVs such as valves, switches, circuit breakers or other components that are not in the expected position/condition.
- 4.3.3 Ensure SM is notified of any labeling discrepancies identified during IVs.
- 4.3.4 Complete all specified procedures or forms with the required IV results in an accurate, neat, and legible manner.

5. INSTRUCTIONS

NOTE

An overview of the IV process is shown in Appendix 1, Independent Verification Flowchart.

5.1 Personnel Training

5.1.1 Personnel performing IVs are trained in the systems or components involved, and routinely operate or manipulate the systems or components involved.

5.1.2 Personnel assigned to perform IVs are current in the training for their job classification.

5.2 Systems and Components Requiring IV

5.2.1 As a minimum, the following generic systems and components are independently verified:

- (1) Valves, breakers, and other components in Vital Safety Systems (VSSs) where an inappropriate positioning could adversely affect system operation or safety envelope integrity
- (2) Valves, breakers, and other components in fire protection system major flow paths that are necessary for the supply of extinguishing media (for example, water, halon, cardox, CO₂) to a fire in VSS, radioactive storage, and work areas
- (3) Valves, breakers, and other components in gaseous and liquid radioactive waste handling and processing systems where an inappropriate positioning could result in radioactive material release to the environment
- (4) Valves, breakers, and other components that are necessary to safely control processing and manufacturing activities associated with plutonium, uranium, special nuclear material, weapons related material, and other material subject to Material Control and Accountability requirements

5.2.1 (continued)

- (5) Valves, breakers, and other components that are necessary to maintain required pressure differential zones where such zones have been established to control or limit the spread of radioactive material or contamination
- (6) Valves, breakers, and other components in any system that provide life support (for example, breathing air) to personnel
- (7) Valves, breakers, and other components in any system that could result in a release of hazardous materials or energy where personnel and environmental safety is concerned

5.3 Conditions Requiring IV

5.3.1 IV is performed under the following conditions on systems and components in the generic list from Subsection 5.2 or the applicable building-specific list(s). IV is also required when specified in approved procedures, when component position is in doubt, or when directed by the SM or other supervisory personnel.

5.3.1.1 Personnel independently verify the removal of equipment from service to ensure that only the intended equipment is rendered inoperable.

5.3.1.2 Independently verify initial system alignments following shutdown during which system status was not maintained in the normal operating lineup.

- 5.3.1.3 If the alignment or status of a listed system or portion thereof has been changed and not independently verified in accordance with an approved procedure or is in question for any reason, the SM or other supervisory personnel determines the need for IV of affected components, and ensures IV is performed by a trained individual if needed.
- 5.3.1.3.1 Considers IV of safety-related components manipulated for maintenance, modification, and testing (for example, surveillance, post maintenance, post modification, pre-operational).
- 5.3.1.3.2 Considers importance to safety, facility activities, and existing conditions in determining the need for IV.
- 5.3.1.4 Personnel independently verify the portion of a system within the boundary isolated by a lockout/tagout when the locks/tags are removed and the system is to be released for unrestricted operations.

- 5.3.1.5 During operating conditions, normal system lineup periodic checks are performed. These checks are independent from any activity that might cause a component to be mispositioned. In this case, the first individual performing the check of the lineup is considered to be the independent verifier; a second check is normally not necessary.
- 5.3.1.5.1 If a mispositioning is discovered while the periodic check is performed:
- .1 SM reviews and approves positioning of the component.
 - .2 Personnel correctly position the component.
 - .3 Performs an IV.
 - .4 SM determines reportability and initiates corrective action.
- 5.3.1.6 Personnel independently verify all locked valves and breakers when these components are manipulated, in accordance 1-15320-HSP-2.08, Lockout/Tagout.
- 5.3.1.7 Independently verify when directed by specific surveillances or test procedures.
- 5.3.1.8 Use an alternate means of IV that does not involve excessive exposure, where possible; such as observing process parameters as approved by OM or SM.
- 5.3.1.8.1 Indicate alternate means, if used, and results.

5.4 Routine Conditions Not Requiring IV

5.4.1 IV is required immediately following maintenance, special tests, modification, or other operational activities, unless:

- (1) The building, process, or system is shutdown, AND
- (2) The affected system is not required to be operable, AND
- (3) The initial system alignments that are performed before resumption of building, process, or system operations accomplish the required IV.

5.4.2 IV is not required if excessive radiation exposure would result. The SM may waive IV if an exposure of greater than 10 millirem per Independent Verification Alignment Checklist would result.

5.4.2.1 The SM records the waiver of IV in the procedure or document that prescribed the verification.

5.4.2.1.1 States the estimated exposure that was anticipated if the IV had been performed.

5.4.2.1.2 Signs and dates the waiver to record authorization of the waiver.

5.5 Verification Techniques

5.5.1 Valves

NOTES

1. *Relative height of a valve stem is not used as the sole determinant of a valve's position.*
2. *The appropriate verification technique for the valve type being verified should be used. Some verification techniques may not be appropriate due to a particular make, model, or type of valve (physical construction). The vendor manual or the responsible supervisor should be consulted if there is any doubt about the correct verification technique to be used.*

5.5.1.1 To verify valves OPEN (does not apply to throttled valves),
personnel performing IV:

5.5.1.1.1 Manipulate the valve in the CLOSED direction only as much
as necessary to remove any slack from the operating
mechanism, and verify valve stem movement.

5.5.1.1.2 Open the valve fully, subject to normal precautions on
back-seating valves.

5.5.1.2 To verify valves CLOSED:

CAUTIONS

1. Use of excessive force to close a valve could damage the valve seat.
2. Opening a valve that is being verified in the CLOSED position could unintentionally release fluid or pressurize piping and other components.

5.5.1.2.1 Manipulate the valve in the CLOSED direction only as much
as necessary to verify the valve is fully closed, and not
binding or difficult to operate.

5.5.1.2.2 Contact the SM if any doubt exists with respect to the valve's actual position.

5.5.1.3 To verify valves throttled:

5.5.1.3.1 Do not manipulate valves or ventilation dampers that have been set in throttled positions based on flow requirements, verify position by visual methods only.

CAUTION

When operation of a throttled valve is necessary to determine position, IV would negate the original throttled position and give no additional assurance of obtaining the correct position. In this case double verification is appropriate.

5.5.1.3.2 If it is necessary to operate valve to determine position, use double verification to determine if valve was in correct throttled position and when returning valve to desired throttled position.

5.5.1.3.3 Manipulate the valve in the CLOSED direction, counting the number of turns to fully close the valve.

5.5.1.3.4 Open the valve to its properly throttled position.

5.5.1.3.5 If system or process operating conditions prohibit closing a throttled valve to verify its position and the act of fully opening the throttled valve will not unduly upset the system or process, use the number of turns throttled closed from full OPEN instead of the normal method of counting the turns OPEN from fully CLOSED.

- 5.5.1.4 To verify Motor Operated Valves (MOVs) and Air Operated Valves (AOVs):

CAUTION

Operability of an MOV that has been manually operated is not guaranteed. Manually positioning an MOV may result in failure of the valve to respond to a Remote Actuation signal (that is, possible overtorquing due to manual operation).

- 5.5.1.4.1 Report any MOV that has been manually operated to the SM.

- 5.5.1.4.2 When verifying MOVs or AOVs, use all available means of valve position indication, such as:

- .1 When remote operating switches are used, verify that the switch is in the correct position.
- .2 When remote indicating lights are used, verify that the lights reflect the correct position.
- .3 When local valve position indicators are used, verify that the local indicator (on the valve/valve operator) indicates the correct position.

5.5.2 Circuit Breakers

- 5.5.2.1 To verify circuit breakers:

- 5.5.2.1.1 Verify the local operating selector switch is in the correct position (for example, Local or Remote).

- 5.5.2.1.2 If accessible, trained personnel verify that breaker power fuses are installed.

- 5.5.2.1.3 Use local indicator lights, when provided, to verify that the breaker has power and is in the correct position.
- 5.5.2.1.4 If the breaker is racked in, use the charging spring indicator, when provided, to verify that the operating spring is charged.
- 5.5.2.1.5 Verify that the breaker is in the correct position and that the cubicle door is in good condition with all fasteners tight.
- 5.5.2.1.6 Verify that the breaker is locked in the proper position, if required, and status lights are appropriate for that position.

5.6 IV Guidelines

- 5.6.1 SM reviews Vital Safety System Schematic (VSSS) prior to having IV performed.
- 5.6.2 Personnel performing IVs follow the guidelines listed below.
 - 5.6.2.1 Use an Independent Verification Alignment Checklist (for example see Appendix 2, Sample Independent Verification Alignment Checklist) for performing IVs unless specific IV alignment checklist already exists in the procedure.
 - 5.6.2.1.1 SM initiates and approves specific checklists by completing the Approved By Block before IV is performed.
 - 5.6.2.1.2 Positioner/1st Checker verifies component is positioned as indicated in Required Position Status Block, and initials in the Positioner/1st Checker Block for each component listed.

5.6.2.1.3 2nd Checker independently verifies component is positioned as indicated in Required Position Status Block, and initials in the 2nd Checker Block for each component listed.

5.6.2.2 If alignment or status deficiencies are identified:

5.6.2.2.1 The Operator performs the following:

- .1 Notifies SM of deficiencies.
- .2 Completes Component ID/Description and Deficiencies Blocks in DEFICIENCIES Section of Independent Verification Alignment Checklist.

5.6.2.2.2 The SM dispositions deficiencies:

- .1 Determines reportability and initiates corrective actions.
- .2 Ensures IV is performed by trained individual if component is realigned to correct position or status.
- .3 Completes Corrective Action Block in DEFICIENCIES Section of Independent Verification Alignment Checklist.

5.6.2.3 The verifier maintains independence by minimizing interaction with any other individual(s) who may be aligning the system or valves.

5.6.2.3.1 Except as noted in Step 5.5.1.3.2, does not rely on the actions of the person performing the initial alignment, installation, or verification to identify the correct component identification, position, or condition.

- 5.6.2.3.2 Maintains actual physical separation as appropriate to prevent interaction.
- 5.6.2.4 Performs IV so each check constitutes an actual identification of the component and determination of both its required and actual position or condition.
- 5.6.2.5 Performs at least one verification locally at the component, if possible, and not subject to excessive radiation exposure as identified in Step 5.4.2.
 - 5.6.2.5.1 Uses different remote indicators, if available, and if one verification cannot be performed locally.
- 5.6.2.6 Verifies remote position indication before de-energizing the control power or motor power which may result in loss of remote indication.
- 5.6.2.7 Uses process parameters as a second check of a component's position or condition only when specified by approved procedures, and exercises care due to the possibility of erroneous indications such as alternate flowpaths or backflow.
- 5.6.2.8 Verifies that the locking device is correctly installed, installed on the correct component, and that the component is in the required position when performing IV of a lockout/tagout.
- 5.6.2.9 Obtains prior SM approval for the use of surveillance testing to satisfy IV requirements. Such surveillance tests conclusively prove the required component position (for example, a flow test to verify the position of a flow control valve).

- 5.6.2.10 Obtains assistance from the SM if unable to verify actual position of a component.
- 5.6.2.11 Obtains assistance from the SM when it is suspected that excessive (greater than 10 millirem) radiation exposure will result from performing an Independent Verification Alignment Checklist.
- 5.6.2.12 Identifies and reports any components that are incorrectly or inadequately labeled, and labels that are missing, worn, illegible, or otherwise not serviceable in accordance with Step 4.3.4.
- 5.6.2.13 SM reviews completed Independent Verification Alignment Checklists for accuracy and completeness.
- 5.6.2.13.1 Completes the Reviewed By Block.

6. RECORDS

- 6.1 Disposition completed Independent Verification Alignment Checklists in accordance with the RFP Records Management Manual and the RFP Quality Assurance Manual.

7. REFERENCES

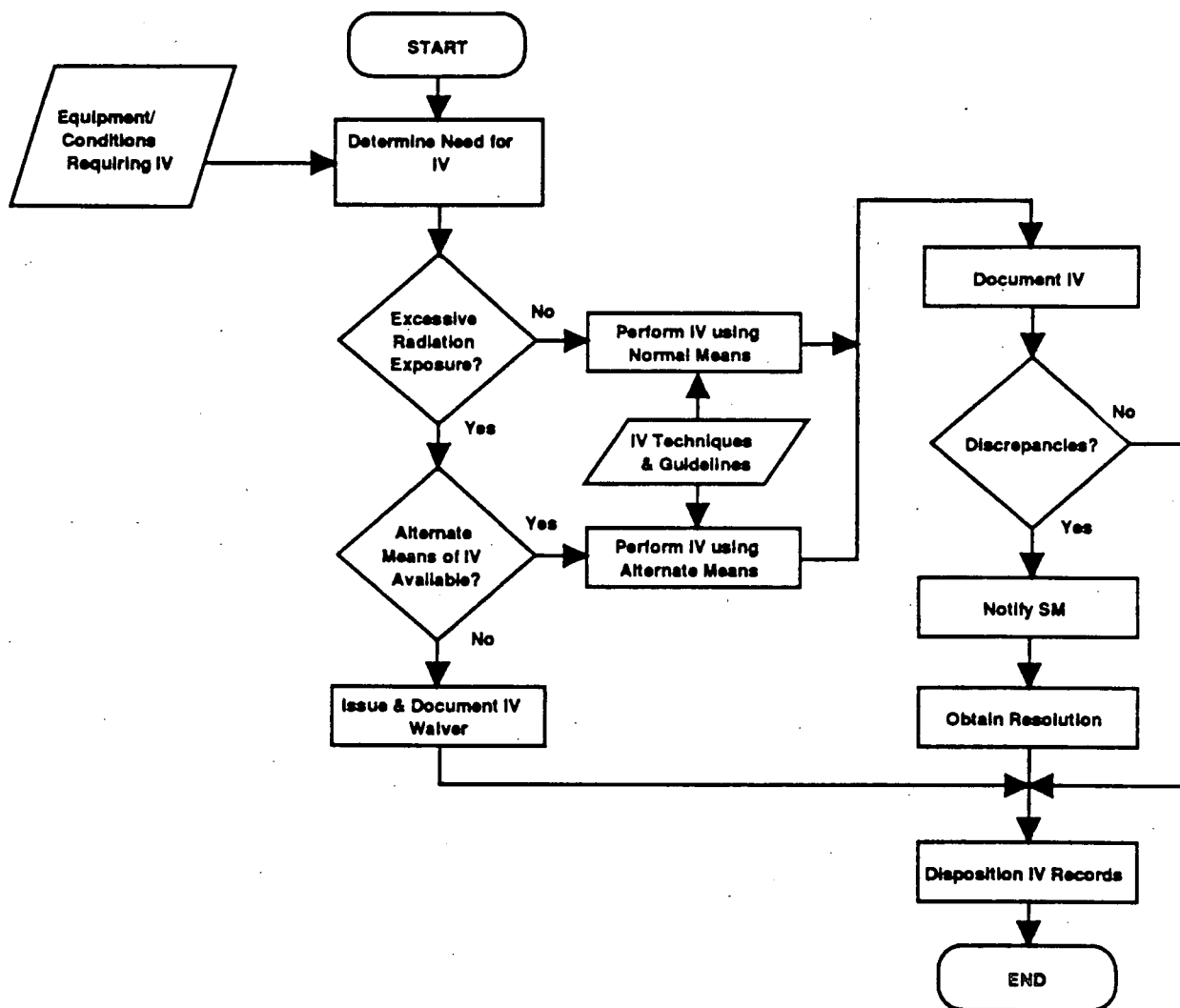
- 7.1 Department of Energy Order 5480.19, Conduct of Operations Requirements for DOE Facilities
- 7.2 Institute of Nuclear Power Operations 87-003, Good Practice OP-214, Independent Verification
- 7.3 RFP Quality Assurance Manual

- 7.4 RFP Records Management Manual
- 7.5 1-10000-TUM, Training Users Manual
- 7.6 1-15320-HSP-2.08, Lockout/Tagout

APPENDIX 1

Page 1 of 1

INDEPENDENT VERIFICATION FLOWCHART



APPENDIX 2

Page 1 of 2

SAMPLE INDEPENDENT VERIFICATION ALIGNMENT CHECKLIST

System/Subsystem _____ Page 1 of _____
Reference Procedure _____

Component ID/Description	Normal Position	Required Position Status	Positioner/ 1st Checker	2nd Checker
APPROVED BY: Name _____ Signature _____ Title _____ Date/Time _____	Positioner/1st Checker Name _____ Signature _____ Title _____ Date/Time St. _____ Date/Time Comp. _____	2nd Checker Name _____ Signature _____ Title _____ Date/Time St. _____ Date/Time Comp. _____	REVIEWED BY: Name _____ Signature _____ Title _____ Date/Time _____	
DEFICIENCIES *Operator completes Component ID/Description and Deficiencies blocks below* **Shift Manager completes Corrective Action block below**				
Component ID/Description	Deficiencies	Corrective Action (Reference governing documents)		

INDEPENDENT VERIFICATION ALIGNMENT CHECKLIST

Page ___ of ___

Continuation Sheet

[illegible]

Rocky Flats Plant 1-31000-COOP-015

REVISION 0

COMMUNICATIONS CRITERIA

APPROVED BY: *John Zane* 10/9/92 Responsible Organization: Plutonium Production
General Manager, Date
Rocky Flats Plant

Effective Date: October 27, 1992

CONCURRENCE:

/s/ G. E. Marx 9/3/92
Associate General Manager, Date
Administration and Planning

/s/ H. S. Berman 9/17/92
Associate General Manager, Date
Engineering

/s/ J. M. Kersh 9/7/92
Associate General Manager, Date
Environmental Restoration Management

/s/ J. M. Kersh 9/7/92
Associate General Manager, Date
Environmental and Waste Management

/s/ E. H. Ideker 9/2/92
Associate General Manager, Date
Facility Management and Operations

/s/ D. W. Ferrera 9/10/92
Associate General Manager, Date
Maintenance and Plant Support

/s/ L. C. Smith for J. G. Davis 9/8/92
Associate General Manager, Date
Performance and Quality Assurance

/s/ J. H. Riley 9/18/92
Associate General Manager, Date
Plant Safety and Security

Spencer Williams Jr 10/06/92
Site Operations Review Committee Chairman Date

John Zane 10/06/92
Subject Matter Expert Date

AFFECTS PLANT SAFETY
PROCEDURE USE CATEGORY 3

CONTROLLED COPY

The following PRRs have been incorporated in this revision:
92-PRR-000589

PADC-92-00452

This procedure supersedes procedure COOP-015, Revision 1.

Reviewed for Classification

By *John Zane*

Date 10-6-92

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
TITLE	1
TABLE OF CONTENTS	2
1. PURPOSE	3
2. SCOPE	3
3. DEFINITIONS	3
4. RESPONSIBILITIES	3
4.1 Operations Manager (OM)	3
4.2 Operations and Support Personnel	4
5. INSTRUCTIONS	5
5.1 General Requirements	5
5.2 Written Communications	7
5.3 Verbal Communications	8
5.4 Hand Signals and Gestures	9
5.5 Communication Methods	10
5.5.1 Face-to-Face Communication	10
5.5.2 Telephone and Two-Way Radio Communications	10
5.5.3 Life Safety/Disaster Warning System	11
5.6 Communications Equipment	13
6. RECORDS	14
7. REFERENCES	14
<u>Appendices</u>	
Appendix 1, Phonetic Alphabet	15
Appendix 2, Radio and Telephone Communication	16

1. **PURPOSE**

- 1.1 This procedure defines the communication criteria required to ensure a complete and consistent exchange of information or instruction.

2. **SCOPE**

- 2.1 This procedure applies to all operational communications at Rocky Flats Plant (RFP).

3. **DEFINITIONS**

- 3.1 Communications. The process of sending and receiving information.
- 3.2 Operational Communications. Messages concerning the operation of the plant.

4. **RESPONSIBILITIES**

4.1 Operations Manager (OM)

- 4.1.1 Ensures communication criteria in this procedure are implemented.
- 4.1.2 Ensures communication equipment is adequate, available, and maintained.
- 4.1.3 Periodically surveys plant areas to ensure all personnel can be alerted to emergency situations when working in high noise areas.

4.2 Operations and Support Personnel

- 4.2.1 Conduct operational communication in accordance with this procedure.
- 4.2.2 Report defective communication equipment in accordance with 1-74000-IWCP-1, Work Control Form Processing.

5. INSTRUCTIONS

5.1 General Requirements

NOTES

1. *The following instructions are general guidelines for the different methods used for communications.*
2. *Abbreviations and acronyms listed in the RFP Dictionary that are part of system names, equipment labels, and daily plant conversation are appropriate for use in written and verbal communication.*

5.1.1 Operations and support personnel ensure each communication contains information or directions necessary to successfully achieve the desired result.

5.1.2 Give directions that are explicit, understandable, and include:

- (1) Who is giving the direction.
- (2) Who is to perform the action.
- (3) What is to be done and, if time permits, why.
- (4) When it is to be done.
- (5) If applicable, what procedure to use.
- (6) Additional communications required (such as when to report back).

5.1.3 Do not include multiple actions in a verbal instruction in most cases.

5.1.3.1 If communicating multiple actions, write down the instructions or give several short verbal instructions after each task is completed.

5.1.4 During evolutions where the potential for miscommunication exists, conduct frequent briefings as directed by the OM or Shift Manager.

- 5.1.5 Use noun names and equipment numbers together.
- 5.1.6 When verbally communicating equipment numbers or other designators that include individual letters, use the phonetic alphabet listed in Appendix 1, Phonetic Alphabet or similar phonetic alphabet, or words that are clarified so as not to be misunderstood.
- 5.1.7 When using commonly known acronyms, such as LCO and OSR, do not use the phonetic alphabet.
- 5.1.8 When verbally receiving data, operating parameters, or infrequently used equipment numbers, write down the information and do not rely on memory.
- 5.1.9 The recipient acknowledges all communications by repeating back the communication as necessary to ensure the originator's communication is correctly understood.
- 5.1.10 If a communication is not understood, the recipient asks the originator to repeat or rephrase the communication.
- 5.1.11 If the recipient repeats or paraphrases the communication incorrectly, the originator immediately repeats or clarifies the communication.
- 5.1.12 The originator of a communication observes applicable displays such as valve position lights and pressure, level, and flow indications to confirm actions of the recipient.
- 5.1.13 When actions are completed or important points in an evolution have been reached, the recipient of a communication reports back to the originator the exact action that was taken and the results of that action.

5.1.14 When reporting emergencies and other occurrences, operations and support personnel:

5.1.14.1 Speak deliberately and distinctly.

5.1.14.2 Identify themselves and their location.

5.1.14.3 Describe nature and severity of the problem.

5.1.14.4 State location of the problem.

5.1.14.5 Keep communication lines open unless otherwise directed or where environmental conditions or radiation levels require immediate evacuation.

5.1.14.5.1 Report back after a successful evacuation.

5.1.15 Conduct communications during emergency situations to not interfere with timely mitigation of the situation in progress.

5.2 Written Communications

5.2.1 Operations and support personnel use written communications when information is too complex or too lengthy to be accurately and completely transmitted verbally or when information must be transmitted to others at a future time.

5.2.2 Examples of formal written communication documents are:

- (1) Operational Safety Requirements (OSRs).
- (2) Administrative procedures.

5.2.2 (continued)

- (3) Operating, technical support, and alarm response procedures.
- (4) Shift, standing, and operations orders.
- (5) Narrative logs, shift records, and shift turnover records.
- (6) Rounds sheets and chronological logs.
- (7) Work control forms.
- (8) Caution tags.
- (9) Operator aids.
- (10) Required reading.

5.3 Verbal Communications

5.3.1 When using verbal communications, operations and support personnel:

5.3.1.1 Use professional language.

5.3.1.2 Speak distinctly and deliberately.

5.3.1.3 Use clear, concise expressions and terminology.

5.3.1.4 Give directions that are explicit and understandable.

5.3.2 The basic verbal message format consists of three parts in the following order:

5.3.2.1 Name, title, and location of recipient

5.3.2.2 Name, title, and location of originator

5.3.2.3 Communication statement

5.3.3 The basic acknowledgement of verbal communication consists of four parts in the following order:

5.3.3.1 Originating individual's name or title

5.3.3.2 Acknowledging individual's name or title

5.3.3.3 Paraphrase or explanation of the instructions or message in the acknowledging individual's own words

5.3.3.4 Confirmation of the acknowledgement by the originating individual

5.4 **Hand Signals and Gestures**

5.4.1 Operations and support personnel use hand signals in accordance with accepted industry practices, such as among crane operators.

5.4.2 Do not use hand signals or gestures in other situations unless the operating environment (such as noise level, face mask) prohibits voice communication.

5.4.3 If hand signals and gestures must be used as a means of controlling a specific task, ensure that the meaning of each hand signal or gesture is understood before performing the task.

5.5 Communication Methods

5.5.1 Face-to-Face Communication

5.5.1.1 Originator begins first communication statement with the name of the recipient.

5.5.1.1.1 Use of title and location by the recipient and originator are not required.

5.5.1.2 If the communication is not interrupted by other activities, formal use of names is not required.

5.5.1.3 Originator ensures recipient repeats back important operational communications to ensure the message is understood.

5.5.2 Telephone and Two-Way Radio Communications

CAUTION

Do not use portable radios in areas that have been identified, posted, and provided with exclusion distances where use of portable radios may result in radio frequency interference with plant equipment.

NOTE

Appendix 2, Radio and Telephone Communication provides examples of radio and telephone communication techniques and terminology.

5.5.2.1 Operations and support personnel use telephone or radio communications whenever possible to minimize use of the Life Safety/Disaster Warning (LS/DW) System.

- 5.5.2.2 Use formal communication practices during normal and emergency operation to ensure accurate and timely transfer of information.
 - 5.5.2.2.1 Begin the telephone or radio communication by stating name, title, and location, followed by the first communication statement.
 - 5.5.2.2.2 When using a telephone party line or radio communications, include identification of the receiver and sender in each statement.
 - 5.5.2.2.3 Make a positive statement of desired actions.
 - 5.5.2.2.4 Specify required time frame for completion of actions.
 - 5.5.2.2.5 If there is doubt concerning any portion of the communication, ask questions.
- 5.5.2.3 Test portable radio equipment before performing activities that require radio communication and when operability is in doubt.
- 5.5.2.4 When clearing a telephone party line or radio channel for priority communications during an emergency, use the phrase SILENCE ON THE LINE, THIS IS AN EMERGENCY.
- 5.5.3 **Life Safety/Disaster Warning System**
 - 5.5.3.1 The LS/DW System is an essential communication element for operations.
 - 5.5.3.2 Management administratively controls access and use of the LS/DW System to ensure that it retains its effectiveness.

- 5.5.3.3 Only authorized personnel use the LS/DW System.
- 5.5.3.4 Use plant telephones and other point-to-point communications instead of the LS/DW System when practical.
- 5.5.3.5 Avoid use of the LS/DW System for paging personnel and unnecessary announcements.
- 5.5.3.6 When drills, exercises, or surveillance tests that include sound signals are conducted, use the LS/DW System to advise personnel that a drill, exercise, or surveillance test is in progress.
- 5.5.3.7 Use the LS/DW System to establish communication with an individual or a location only when such communication is important to the conduct of operations or to personnel safety.
- 5.5.3.8 If it is necessary to give instructions over the LS/DW System, the originator requests and receives direct voice, telephone, or radio communications from the recipient.
- 5.5.3.9 The LS/DW System is capable of promptly alerting personnel to plant emergencies.
 - 5.5.3.9.1 If emergencies or important events occur, such as implementation of the Emergency Plan, authorized personnel use the LS/DW System to transmit information and directions to site personnel.

5.5.3.9.2 When personnel are working in areas where the LS/DW System or emergency alarms cannot be heard, operations and support personnel use alternate methods, such as beacons, strobes, personal pagers that vibrate, radio headsets, and persons dedicated to notifications for alerting these personnel.

5.5.3.9.3 The LS/DW System has priority to override other users in the event of an emergency announcement in accordance with the following priority:

- (1) Criticality alarm
- (2) Building announcement
- (3) Plant announcement

5.6 Communications Equipment

5.6.1 OMs ensure that adequate communications equipment is available and properly maintained to provide plant coverage.

5.6.2 Ensure plant communication coverage is comprehensive enough to ensure that all personnel can be contacted for routine and emergency communications.

5.6.3 Make distinctions between routine and emergency communications.

5.6.4 Control communications equipment such as horns, sirens, bells, and the LS/DW System to ensure that they do not detract from normal operations and are available in an emergency.

5.6.5 Ensure emergency communications equipment is tested periodically to ensure it is functional.

6. RECORDS

Section not required

7. REFERENCES

- 7.1 Department of Energy (DOE) Order 5480.19, Conduct of Operations Requirements for DOE Facilities
- 7.2 INPO 87-018, Operational Communications - Verbal
- 7.3 1-74000-IWCP-1, Work Control Form Processing

APPENDIX 1
Page 1 of 1

PHONETIC ALPHABET

The phonetic alphabet is used when alphanumeric information is verbally communicated to minimize misinterpretation.

A - Alpha	N - November
B - Bravo	O - Oscar
C - Charlie	P - Papa
D - Delta	Q - Quebec
E - Echo	R - Romeo
F - Foxtrot	S - Sierra
G - Golf	T - Tango
H - Hotel	U - Uniform
I - India	V - Victor
J - Juliett	W - Whiskey
K - Kilo	X - X-ray
L - Lima	Y - Yankee
M - Mike	Z - Zulu

APPENDIX 2

Page 1 of 1

RADIO AND TELEPHONE COMMUNICATION

CALL-UP: (To You) "This is _____ (From Me)
(Use Last Name, Title and/or Location)

Examples: "Jones, this is Smith."
"Control Room SOE, this is the Shift Manager."

ACKNOWLEDGEMENT: Call-up. Repeat back or paraphrase to extent necessary to ensure originator knows that message is understood.

TERMINOLOGY

MEANING

Copy or Roger

I understand.

WILCO

I understand and will comply.

Say again

I do not understand.

Wrong

Information is incorrect.

Correction

Correct information follows.

Over

End of message. Now call back.
(Used for acknowledgement or repeat
back needed.)

"Out"

End of message. Do not call back.
(Used when no further communication
required.)

Rocky Flats Plant

1-31000-COOP-016

REVISION 0

PLAN OF THE DAY (POD)

APPROVED BY: *[Signature]* 10/9/92 Responsible Organization: Plutonium Production
General Manager, Rocky Flats Plant Date

CONCURRENCE:

Effective Date: October 27, 1992

/s/ G. E. Marx 9/3/92
Associate General Manager, Administration and Planning Date

/s/ H. S. Berman 9/17/92
Associate General Manager, Engineering Date

/s/ J. M. Kersh 9/7/92
Associate General Manager, Environmental Restoration Management Date

/s/ J. M. Kersh 9/7/92
Associate General Manager, Environmental and Waste Management Date

/s/ E. H. Ideker 9/2/92
Associate General Manager, Facility Management and Operations Date

/s/ D. W. Ferrera 9/10/92
Associate General Manager, Maintenance and Plant Support Date

/s/ L. C. Smith for J. G. Davis 9/8/92
Associate General Manager, Performance and Quality Assurance Date

/s/ J. H. Riley 9/18/92
Associate General Manager, Plant Safety and Security Date

[Signature] 10/06/92
Site Operations Review Committee Chairman Date

[Signature] 10/06/92
Subject Matter Expert Date

AFFECTS PLANT SAFETY
PROCEDURE USE CATEGORY 3

CONTROLLED COPY

The following PRRs have been incorporated in this revision:
92-PRR-000591 92-PRR-000894

This procedure supersedes procedure COOP-016, Revision 0.

PADC-92-00453

Reviewed for Classification

By *[Signature]*

Date 10-6-92

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
TITLE	1
TABLE OF CONTENTS	2
1. PURPOSE	3
2. SCOPE	3
3. DEFINITIONS	3
4. RESPONSIBILITIES	3
4.1 Operations Manager	3
4.2 Shift Manager (SM)	4
4.3 POD Meeting Attendees and Operations and Support Group Supervisors	4
4.4 Building Training Manager	5
5. INSTRUCTIONS	6
5.1 General POD Requirements	6
5.2 General Requirements for POD Meetings	8
5.3 POD Meeting Conduct	9
6. RECORDS	10
7. REFERENCES	10
<u>Appendices</u>	
Appendix 1, Plan of the Day Flow Chart	11
Appendix 2, Sample Plan of the Day (POD)	12
Appendix 3, Sample Items Controlled by the Plan of the Day	14
Appendix 4, Sample Evolution Request Form	15

1. PURPOSE

- 1.1 This procedure provides requirements, guidelines, and instructions associated with the Plan of the Day (POD) process used to control operations and maintenance activities at Rocky Flats Plant (RFP).

2. SCOPE

- 2.1 The requirements, guidelines, and instructions of this procedure apply to the development, issuance, and use of the POD by buildings and areas within the responsibility of RFP Operations Managers (OMs), to the conduct of the POD meeting, and to the personnel involved in these activities.

3. DEFINITIONS

- 3.1 Out of Commission (OOC). The terminology used for equipment, components, or systems when they are removed from service and no future use or mission is identified. OOC equipment, components, and systems may be retired in place.

4. RESPONSIBILITIES

4.1 Operations Manager

- 4.1.1 Schedules POD meetings and designates attendees.
- 4.1.2 Conducts POD meetings, or directs designee to conduct meeting.
- 4.1.3 Ensures that the master copy of the POD is updated and reissued as required by this procedure.
- 4.1.4 Maintains POD distribution list and distributes POD.

- 4.1.5 Directs individuals to perform followup action on open POD items.
- 4.1.6 Prepares updated Out of Service (OOS) and OOC lists for attachment to the POD.
- 4.1.7 Ensures that only activities scheduled in the POD are conducted.

4.2 **Shift Manager (SM)**

- 4.2.1 Maintains master copy of the POD.
- 4.2.2 Presents plant and activity status at the POD meeting.
- 4.2.3 Follows the status of each POD item.
- 4.2.4 Ensures that only activities scheduled in the POD are conducted.

4.3 **POD Meeting Attendees and Operations and Support Group Supervisors**

- 4.3.1 Attend, or designate an alternate to attend, POD meetings as required by this procedure or as directed by the OM.
- 4.3.2 Provide information on POD items, including new items, significant status changes, and noncompletion of scheduled items.
- 4.3.3 Perform followup action on open POD items, and determine estimated completion time as directed by the OM.
- 4.3.4 Notify OM or SM of any cancellations of activities scheduled on the POD.

- 4.3.5 Prior to issuing a work item scheduled on the POD, except as provided in Step 5.1.5, verify items in Step 5.1.3 are satisfied.

4.4 Building Training Manager

- 4.4.1 Prepares Training Plans of the Week.
- 4.4.2 Receives training cancellations for planning purposes.
- 4.4.3 Provides additional information as requested, at POD meetings.

5. INSTRUCTIONS

NOTE

An overview of the process for the POD is shown in Appendix 1, Plan of the Day Flow Chart.

5.1 General POD Requirements

5.1.1 OM issues a POD to cover all periods of operation in assigned buildings and areas.

5.1.1.1 The POD covers at least a 24-hour period.

NOTE

Appendix 2, Sample Plan of the Day (POD) provides samples of a POD.

5.1.1.2 POD may cover other periods as determined by OM.

5.1.1.3 Issues the POD at least 6 hours before the period covered by the POD.

NOTE

Appendix 3, Sample Items Controlled by the Plan of the Day provides a list of items controlled by the POD.

5.1.1.4 The POD contains operations, maintenance, and related activities approved by the OM.

5.1.1.5 Ensures that an updated OOS equipment list is prepared and included as an attachment in the POD issued each Friday.

5.1.1.6 Ensures that an updated OOC equipment list is prepared and included as an attachment in the POD issued at least monthly.

- 5.1.2 Operations, maintenance, construction, subcontractor, or other personnel requiring an activity to be performed:
 - 5.1.2.1 Submit to OM a completed Evolution Request Form no later than 10:00 AM the day before the required activity is to start. (See Appendix 4, Sample Evolution Request Form)
 - 5.1.2.2 Attend the POD meeting to provide additional information as requested.
 - 5.1.2.3 Submit training cancellations to Building Training Manager or equivalent.
- 5.1.3 Prior to issuing a work item scheduled on the POD, except as provided in Step 5.1.5, the OM verifies that:
 - (1) Material is available to the performing organization.
 - (2) Manpower is available (including support personnel).
 - (3) Approved work control documents and permits are available.
 - (4) Plant conditions have been established which support the work.
- 5.1.4 If training activities are scheduled for the next week (Monday through Sunday), the Building Training Manager or equivalent:
 - 5.1.4.1 Prepares and submits to the OM for issue on the Friday POD, a Training Plan of the Week no later than 2:00 PM on the Thursday before training.
 - 5.1.4.2 Attends the POD meeting to provide additional information as requested.

5.1.4.3 Receives training cancellations to plan and prepares accordingly.

5.1.5 The OM approves limited additions and changes to the issued POD if the activities:

- (1) Are required to ensure continued safe, reliable, and efficient facility operations.
- (2) Are required to support an item already approved on the POD and would substantially hinder job completion if not added.
- (3) Were approved on the previous day's POD but were inadvertently deleted from the active POD.
- (4) Can make use of resources not utilized due to cancellation of scheduled work items, or additional available resources.

5.1.6 The SM ensures that building or area activities are conducted in accordance with the approved POD.

5.1.7 The SM maintains the master copy of the POD and ensures that the status of each item, including revised Estimated Completion Date for each incomplete item, is updated.

5.1.8 OM directs the preparation of schedules to permit planning and coordination of selected activities for future PODs.

5.2 General Requirements for POD Meetings

5.2.1 OM schedules and conducts POD meetings to coordinate support groups and other activities for items on the POD for the next day.

5.2.2 One or more POD meetings are held daily, Monday through Friday, as designated by the OM.

- 5.2.3 OM designates the time, location, and attendees for POD meetings.
- 5.2.3.1 Meeting schedules attempt to minimize the time for craft or other operations or support personnel to wait for authorization to proceed with planned activities.
- 5.2.4 Designated attendees support the POD meeting by:
 - 5.2.4.1 Attending the meeting, or designating an authorized representative.
 - 5.2.4.2 Providing information on POD items, including new items, significant status changes, and noncompletion of scheduled items.
 - 5.2.4.3 Performing follow-up action on open POD items, and determining estimated completion time as directed by the OM.
- 5.3 **POD Meeting Conduct**
 - 5.3.1 OM conducts the POD meeting.
 - 5.3.2 The meeting agenda includes:
 - (1) A discussion by the SM of plant and activity status.
 - (2) A discussion of the POD items by building in the order determined by OM.
 - (3) Reports by required attendees on items within their responsibility as required by Step 5.2.4.
 - (4) Discussion of additional items brought forward as directed by the OM.
 - (5) Followup action assignments by the OM for open POD items.

6. RECORDS

- 6.1 Records generated by this procedure are retained in accordance with RFP Records Management Manual and RFP Quality Assurance Manual.
- 6.2 The OM ensures all completed logs and records are dispositioned in accordance with RFP Records Management Manual and 1-48000-QAR-001.

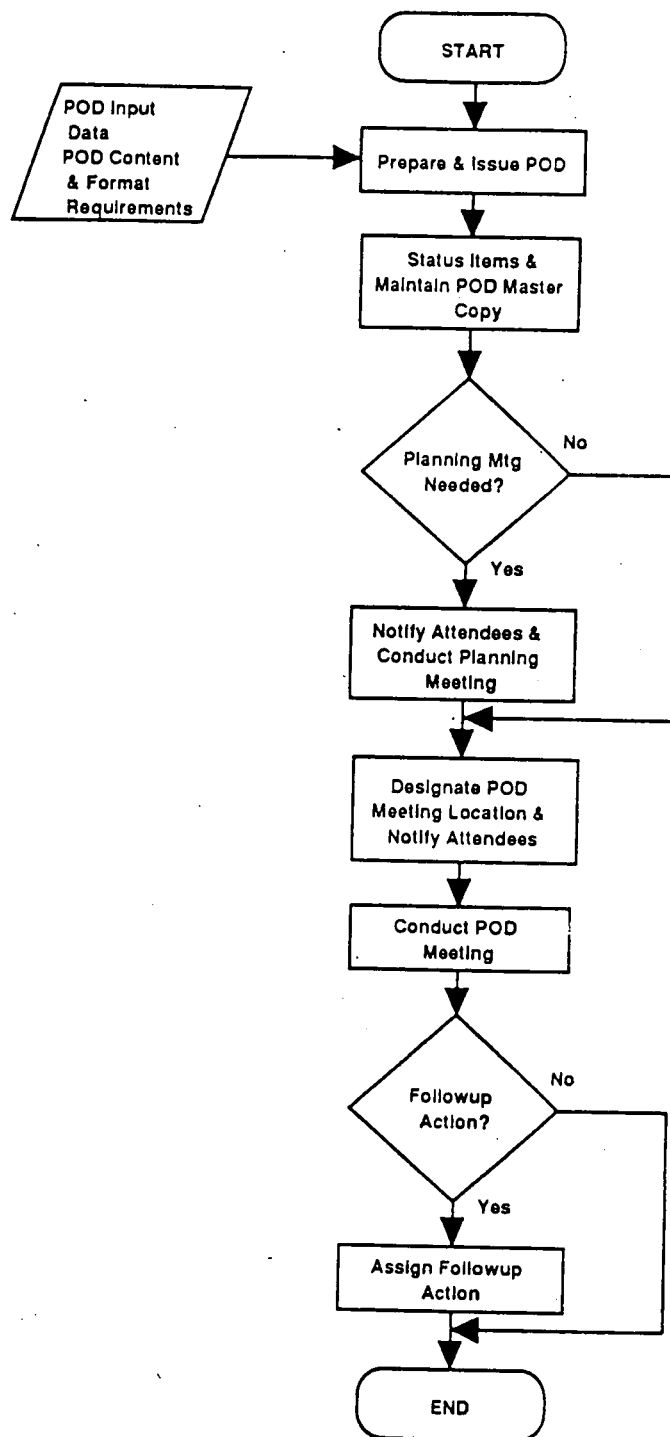
7. REFERENCES

- 7.1 RFP Quality Assurance Manual
- 7.2 RFP Records Management Manual
- 7.3 1-48000-QAR-001, Quality Assurance Records

APPENDIX 1

Page 1 of 1

PLAN OF THE DAY FLOW CHART



APPENDIX 2
Page 1 of 2

SAMPLE PLAN OF THE DAY (POD)

ANALYTICAL OPERATIONS FACILITY SCHEDULE
XXX & SUPPORT BUILDINGS
BUILDINGS: XXX, XXX, ...
FINAL POD
XXX Page 1 of 2
Facility Condition:

FOR PERIOD: XXXXXX - XX:XX to XXXXXX - XX:XX													
Description	WCMR#	Pwr. On	3 Time	Pwr. Off	3 Time	Periodic Evaluation							Remarks
						Tue	Wed	Thurs	Fri	Sat	Sun	Mon	
1. SURVEILLANCES						08/18	08/19	08/20	08/21	08/22	08/23	08/24	
(Daily Mid Shift) Cuckoo Alarm Sys. Surveillance	RI 4202	Flaring	Jan 01	N/A	00:01								N/A
(Daily Day Shift) Cuckoo Alarm Sys. Surveillance	RI 4202	Flaring	Jan 01	N/A	07:30								N/A
(Daily PM Shift) Cuckoo Alarm Sys. Surveillance	RI 4202	Flaring	Jan 01	N/A	15:30								N/A
(Daily) SAAMs Verification	POI-4.5	RIPT	Jan 01	N/A	03:30								N/A
(Daily) Chemical Hygiene Surveillance	AO	AO	May 21	N/A	08:00								N/A
(Weekly) AOA Waste Assessment	AOA	AOA	Apr 02	N/A	09:00								N/A
(Monthly) Visual Inspection Fire Alarms 779, 728, 782		Alarm	Aug 17	08:15	08:30								N/A
(Monthly) SAAM Performance Test	RI 2204	Flaring	Aug 20	08:00	08:30								N/A
(Annual) Tamper Alarm Test	4.7-9600 Test 019	Alarm	Aug 19	16:00	16:30								N/A
VSS WORK PACKAGES													
(POD) Test Fuel Stage 408 Pressure 729	17044151	Flare	Aug 19	16:00	16:30								N/A
(Hydraulic) Calibrate Model 755 Oxygen Analyzer	17044152	MITC	Aug 18	08:00	08:30								N/A
NON VSS WORK PACKAGES													
(Daily) ICS & Intrap Security Alarms 779 & Support Bldg	17048453	Alarm	Jul 15	08:00	08:15								N/A
(Daily) Monday PNC's Pipe, Elm, MacdHill	PNC's	MITC	Aug 01	N/A	08:00								N/A
(Daily) Walkdown of 'A' & 'B' Pkg	17033628	MITC	Jul 01	08:00	08:30								N/A
(Daily) Intrap Lights as Necessary	17049270	MITC	Aug 12	08:00	08:30								N/A
(Daily) Building Sys	17051558	MITC	Aug 12	08:00	08:30								N/A
(Daily) Etc. Feed: Walkdown	17053382	MITC	Aug 12	08:00	08:30								N/A
(Check & Intrap Air Conditioning)	17048434	MITC	Aug 14	08:00	08:30								N/A
(Fabricate) Confection Bar	17050000	MITC	Aug 17	N/A	08:00								N/A
(Intrap) Pileblocks Drailings on Fan 401A B 782	17049270	MITC	Aug 14	08:00	08:30								N/A
(IFC) BELIS ON SUPPLY FAN 406	17049270	MITC	Aug 19	08:00	08:30								N/A
TRAINING/MEETINGS													
(Daily) Plan Of The Day	COOP-16	AO	Jan 01	N/A	13:00								N/A
(Daily) POD Pre Briefing		AOA	Jan 01	N/A	07:45								N/A
(Daily) AOA Pre Shift Briefing		Pre-OP	Jan 01	06:30	07:00								N/A
(Daily) AOA Pre Shift Briefing		Pre-OP	Jan 01	06:15	06:45								N/A
(Daily) AOA Pre Shift Briefing		Pre-OP	Jan 01	15:15	15:45								N/A
(Weekly) Analytical Ops Meeting (559)		AN OPS	Jul 08	N/A	14:30								N/A



BUILDINGS: XXX. XXX.

Endline Condition

XXX Page 2 of 2

[illegible]

APPENDIX 3

Page 1 of 1

SAMPLE ITEMS CONTROLLED BY THE PLAN OF THE DAY

- Maintenance repair activities
- Maintenance testing activities
- Preventive maintenance items
- Construction/contractor work items
- Limiting Conditions for Operation (LCO) checks and surveillances
- Waste transfer operations
- Special nuclear material (SNM) and hazardous material inventories
- Equipment rotation
- Special tests
- Alarm checks, tests, and calibrations
- Instrument checks, tests, and calibrations
- Housekeeping items
- Safety equipment checks, tests, and work items
- Inspections
- Equipment checks and tests
- Analyses
- Sampling activities
- Lockout/tagout items (significant impact on manpower or plant operations only)
- Tours and audits
- Emergency procedure tests and exercises
- Training items

APPENDIX 4

Page 1 of 1

SAMPLE EVOLUTION REQUEST FORM

EVOLUTION REQUEST FORM

Rev. 5 (10/91)

Date: _____

WC#/WP# Number: _____

Job Description: _____

The building for which the activity is to be performed: _____

The department/organization performing the activities: _____

Type of Activities (check one; the section you want to be placed on POD Schedule):

☐ Surveillance ☐ VSS Pckg. ☐ Non VSS ☐ Tour/Inspection ☐ Training/Meetings ☐ Other

Type of Schedule: ☐ Daily ☐ Weekly ☐ Other: _____

Shift for the Activities?

☐ 1ST ☐ 2ND ☐ 3RD

Total Man Power Involved in Activities? _____

Material Ready?

☐ YES ☐ NO ☐ N/A

Packages Complete with Signatures?

☐ YES ☒ NO ☐ N/A

LO/TO Required?

☐ YES ☐ NO ☐ N/A

Radiological Work Permit, (24 Hours Advance)

RWP# _____

Pre-Evolution Time: _____ Place: _____

Date to Perform the Work: _____ Start Time: _____

Est. Completion Date: _____ End Time: _____

Support Requirements: _____

COMMENTS: _____

I have read and understand the requirements of COOP-16.

I am familiar with the format and administrative requirements of Building 559 and Building 779 Plan of the Days (POD's)

Print Name: _____ Organization: _____

Phone/Ext/Page/Fax: _____ Building: _____

Signature: _____ Date: _____

Rocky Flats Plant

1-31000-COOP-017

REVISION 0

CONTROLLED DEACTIVATION OF ALARMS

APPROVED BY: J. L. Zane 6/26/92 Responsible Organization: Plutonium Production
 General Manager, Rocky Flats Plant Date

Effective Date: 07/15/92

CONCURRENCE:

L. E. Marx 6/26/92
 Assistant General Manager, Administration and Planning Date

John D. West 6/26/92
 Associate General Manager, Environmental and Waste Management Date

K. G. Tallman 6/26/92
 Assistant General Manager, Non-Plutonium Operations Date

James H. Smith 6/26/92
 Assistant General Manager, Performance-Based Training Date

W. H. Hylberg 6/26/92
 Assistant General Manager, Plutonium Recovery Date

W. A. Kirby 6/26/92
 Assistant General Manager, Quality Assurance Date

D. W. Fenn 6/29/92
 Assistant General Manager, Technical Support Date

Mark J. Smith 6/30/92
 Operations Review Committee Chairman Date

K. S. Bennett 6/26/92
 Assistant General Manager, Engineering Date

R. C. Conner 6-26-92
 Assistant General Manager, Health and Safety Date

John A. Davis 6/27/92
 Assistant General Manager, Performance Assurance Date

V. M. Pizzuto 6/26/92
 Assistant General Manager, Plutonium Production Date

W. H. Smith 6/30/92
 Assistant General Manager, Program and Project Management Date

W. H. Smith for MTS 6/26/92
 Assistant General Manager, Radiation Protection Date

J. F. Schmitt 6/30/92
 Subject Matter Expert Date

AFFECTS PLANT SAFETY

PROCEDURE USE CATEGORY 3

The following PRRs have been incorporated in this revision:
 92-PRR-000503

Reviewed for Classification

By R. T. Koller 6/30/92

Date 6/30/92

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
TITLE.....	1
TABLE OF CONTENTS	2
1. PURPOSE	3
2. SCOPE	3
3. DEFINITIONS	4
4. RESPONSIBILITIES	5
4.1 Operations Manager (OM)	5
4.2 Shift Manager (SM)	6
4.3 Shift Technical Advisor	7
4.4 System Owner/Manager/User	7
4.5 Systems Engineering	8
5. INSTRUCTIONS	9
5.1 Compensatory Measures	9
5.2 Alarm Deactivation Request	10
5.3 Alarm Deactivation Request Preparation	10
5.4 Alarm Deactivation Request Concurrence	12
5.5 Alarm Deactivation Request Approval	12
5.6 Alarm Deactivation	13
5.7 Alarm Reactivation	15
6. RECORDS	16
7. REFERENCES	17
<u>Appendices</u>	
Appendix 1, Sample Alarm Deactivation Request (ADR)	19
Appendix 2, Sample Deactivated Alarm Log	21

1. PURPOSE

- 1.1 This procedure describes actions to be taken for deactivation and reactivation of all alarms affecting safety at the Rocky Flats Plant (RFP) and to ensure compliance with applicable Operational Safety Requirements (OSRs) and Limiting Conditions for Operations (LCOs).

2. SCOPE

- 2.1 This procedure applies to alarms for all Category 1, 2 and 3 systems.
- 2.2 This procedure applies to all alarms that affect personnel safety.
- 2.3 This procedure applies only to alarms deactivated due to system malfunction, maintenance activities, or other activities not associated with routine equipment cycling or replacement.
- 2.4 This procedure does not apply to:
- (1) Controlled deactivation due to normal cycling of equipment from one parallel system to another parallel system (for example, monthly rotation of fans by the Utilities Department).
 - (2) Routine replacement of equipment (for example, routine Selective Alpha Air Monitor exchange).
 - (3) Prompt (within 4 hours) repair or replacement of dysfunctional safety class alarms when repair or replacement is an LCO-required remedial action and repair or replacement is performed in accordance with approved procedures.
 - (4) Security alarms whose deactivation and control is accomplished in accordance with Rocky Flats Security Manual and subordinate procedures.
 - (5) Safety-related alarm response activities accomplished in accordance with applicable Alarm Response Procedures and associated OSRs.
 - (6) Process alarm response activities directed by the applicable operating procedure(s).

- 2.5 Potential hazards associated with alarm deactivation are identified in accordance with Health and Safety Practices Manual (HSP), Section on Operational Safety Analysis (OSA) even though an OSA is not necessarily required for deactivating each individual alarm.
- 2.6 Each operational area has 1 year to implement this procedure from the approval date and ensure implementation is consistent with site building's current mission and programmatic importance.

3. DEFINITIONS

- 3.1 **Alarm**. An energized visual and/or audible annunciator activated when system parameters exceed design set point. An alarm serves to alert the operator that action must be taken to prevent damage to equipment, hazard to personnel, or other undesirable condition.
 - 3.1.1 **Out of Service (OOS) Alarm**. Any alarm that is not available for operation and will be returned to service.
 - 3.1.2 **Out of Commission (OOC) Alarm**. An alarm that is not available for operation and will not be returned to service.
 - 3.1.3 **Spurious Alarm**. An alarm that actuates for other than its designed intent.
- 3.2 **Alarm Deactivation**. Action resulting in a change or modification in the signal, audibility, light, or indicator received or transmitted by a system to alert an operator that the system is dysfunctional or a change in system function requires operator action. Changes to set points within established ranges identified in OSRs are not considered alarm deactivations. Set points beyond established ranges are design changes and require Systems Engineering and Safety Analysis approval.

- 3.3 **Alarm Deactivation Request (ADR)**. A form that is prepared by the user in conjunction with applicable participants and approved by the Operations Manager. [See Appendix 1, Sample Alarm Deactivation Request (ADR).]
- 3.4 **Compensatory Measures**. An approved method or system used to perform as backup/comparable indication for the function as the deactivated alarm.
- 3.5 **Safety Class Items**. Systems, components, and structures, including portions of process systems, the failure of which could adversely affect the environment or the safety and health of the public or worker.

4. RESPONSIBILITIES

4.1 Operations Manager (OM)

- 4.1.1 Assigns ADR numbers and tracks ADRs in progress.
- 4.1.2 Reviews ADRs and associated compensatory measures for completeness and accuracy.
- 4.1.3 Ensures compensatory measures can be established prior to ADR approval.
- 4.1.4 Ensures a Safety Evaluation Screen is completed for deactivation of Vital Safety System (VSS) alarms.
- 4.1.5 Approves alarm deactivation by signing and dating the ADR.
- 4.1.6 Maintains a file of permanently deactivated alarms. This file may be included as part of OOS/OOC list.

- 4.1.7 Performs a monthly audit of all deactivated alarms, and documents in Comments Section of Deactivated Alarm Log.
- 4.1.8 Maintains completed ADR and Deactivated Alarm Log [for examples see Appendix 1, Sample Alarm Deactivation Request (ADR) and Appendix 2, Sample Deactivated Alarm Log] sheets in a retrievable file for 1 year from reactivation verification date.
- 4.1.9 Transfers completed ADRs and Deactivated Alarms Log sheets to storage following the 1-year building retention time in accordance with RFP Records Management Manual.
- 4.1.10 Tracks deactivated alarms to ensure that reactivation is accomplished within an approved time frame or immediately after systems are returned to an operable state.
- 4.1.11 If alarms are not reactivated within the prescribed time frame, takes corrective action, and documents in Deactivated Alarm Log, as a minimum.

4.2 Shift Manager (SM)

- 4.2.1 Verifies all alarms affecting an LCO have approved and implemented compensatory measures before allowing deactivation.
- 4.2.2 If a deactivated alarm requires an alternate method of meeting an LCO surveillance, notifies Surveillance Tracking Coordinator of approved compensatory measures in place.
- 4.2.3 Makes SM log entry each time an alarm is deactivated or reactivated.
- 4.2.4 Updates System Status Board each time an alarm is deactivated or reactivated.

4.2.5 Ensures deactivated alarms are posted with appropriate tag (for example, Work Control Tag, Caution Tag, Information Tag).

4.2.6 Assists OM in maintaining Deactivated Alarm Log.

4.2.7 Reviews Deactivated Alarm Log as a part of shift turnover.

4.3 Shift Technical Advisor

4.3.1 Provides technical assistance to SM and OM in determining if compensatory measures are sufficient to allow deactivation of a given alarm.

4.3.2 Logs time that VSS alarms are deactivated and reactivated.

4.4 System Owner/Manager/User

4.4.1 Reviews ADRs and associated compensatory measures for completeness and accuracy.

4.4.2 Verifies alarm deactivation does not violate LCOs.

4.4.3 If compensatory measures require engineering or development, verifies System Engineering concurs with compensatory measures.

4.4.4 Ensures compensatory measures can be established prior to ADR approval.

4.4.5 If alarm is VSS item, ensures Safety Evaluation Screen is prepared for alarm deactivation.

- 4.4.6 Obtains concurrence from Operations Review Committee for all Safety Evaluation Screens.
- 4.4.7 Reviews and concurs with alarm deactivation by signing and dating ADR.
- 4.4.8 Obtains concurrence from all applicable participants.
- 4.4.9 Obtains approval from OM.
- 4.4.10 Documents verification of alarm reactivation by signing and dating ADR.

4.5 Systems Engineering

- 4.5.1 Supports requests for engineering of compensatory measures using Temporary Change Requests.
- 4.5.2 Verifies technical adequacy of compensatory measures for alarm deactivation.
- 4.5.3 Reviews and concurs with engineered compensatory measures for safety class alarms by signing and dating the ADR.

5. INSTRUCTIONS

5.1 Compensatory Measures

- 5.1.1 Systems Engineering, OM, and Systems Owner/Manager, as a minimum, approve engineered compensatory measures (such as installation of temporary mechanical or electrical devices or systems).
- 5.1.2 OM approves administrative compensatory measures (such as stationing personnel to relay alarm status from operational alarms or visually monitoring system or equipment condition).
- 5.1.3 Compensatory measures are considered adequate when, as a minimum, they meet the design intent of the disabled alarm (for example, a 24-hour fire watch would meet the design intent of a local smoke alarm).
- 5.1.4 Compensatory measures ensure that the design function of deactivated alarm is maintained or equipment is shutdown so the design function of the deactivated alarm is not required.
- 5.1.5 Compensatory measures are mandatory for deactivation of safety class alarms.
- 5.1.6 Where alarms required to be operable by LCOs are deactivated, compensatory measures must include Remedial Action required by the OSR.

- 5.1.7 Systems Engineering, OM, and Systems Owner/Manager have authority to require compensatory measures when nonsafety class alarms essential to personnel safety (such as supplied breathing air low pressure alarms) are deactivated.

5.2 Alarm Deactivation Request

- 5.2.1 If an alarm has failed, System Owner/User completes an ADR within 24 hours.
- 5.2.2 To intentionally deactivate an alarm, completes an ADR before alarm deactivation.
- 5.2.3 If an alarm is deactivated or reactivated by an approved procedure and deactivation and reactivation of alarm is documented within the body of the procedure, an ADR is not required.

5.3 Alarm Deactivation Request Preparation

- 5.3.1 The Originator prepares the ADR.
 - 5.3.1.1 Completes and double checks all line items before submitting ADR for approval.
 - 5.3.1.2 Determines if alarm is a safety class or nonsafety class item.
 - 5.3.1.2.1 If the alarm is classified as safety class, the public and/or environment may be at risk by deactivating the alarm.
 - 5.3.1.2.2 Discusses questions on alarm classification with OM.
 - 5.3.1.3 Provides building number.

- 5.3.1.4 Provides location, including such nonwork areas as locker room or entry way.
- 5.3.1.5 Provides system name for which the alarm is a part (for example, Life Safety/Disaster Warning System).
- 5.3.1.6 When engineered compensatory measures are required, provides drawing number.
 - 5.3.1.6.1 When drawing number is not required, marks this item N/A.
- 5.3.1.7 If a lockout/tagout is used to deactivate the alarm, provides lockout/tagout number.
 - 5.3.1.7.1 If lockout/tagout is not used, marks this item N/A.
- 5.3.1.8 Provides identification number located on the alarm.
- 5.3.1.9 Provides planned deactivation time period. This is the planned deactivation time/date to the required reactivation time/date.
- 5.3.1.10 Provides a brief but complete description of the reason for alarm deactivation.
- 5.3.1.11 Lists all documents that provide the reason for and/or direct deactivation of the alarm.
- 5.3.1.12 If alarm is classified as safety class, provides complete description of compensatory measures required during alarm deactivation.

- 5.3.1.13 Determines if deactivation of this alarm will affect minimum alarm capability required by Final Safety Analysis Report (FSAR), Chapter 7.

- 5.3.1.13.1 If alarm is required by LCO, provides applicable LCO numbers.

5.4 Alarm Deactivation Request Concurrence

- 5.4.1 If alarm is deactivated by an approved procedure, concurrence is not required.
- 5.4.2 Health and Safety concurrence is required as determined by OM.
- 5.4.3 System Owner/Manager provides concurrence for deactivation of all alarms.
- 5.4.4 If the alarm is classified as safety class, Systems Engineering provides concurrence.
- 5.4.4.1 For all other types of alarms, marks this line N/A.

5.5 Alarm Deactivation Request Approval

- 5.5.1 OM normally approves ADR.
- 5.5.1.1 If OM is not available, approval may be obtained from SM.
- 5.5.2 OM assigns ADR number after approval, and documents ADR number in header block of ADR.

5.6 Alarm Deactivation

5.6.1 SM controls alarm deactivation:

5.6.1.1 Verifies all required concurrence and approval signatures are obtained before alarm deactivation.

CAUTION

Compensatory measures are mandatory for deactivation of safety class alarms.

5.6.1.2 Verifies all required compensatory measures are implemented before alarm deactivation.

5.6.1.3 If required, initiates lockout/tagout for deactivated alarm.

5.6.1.4 Grants permission to deactivate alarm.

5.6.2 When alarm is deactivated, Operator provides signature, time, and date on ADR.

5.6.3 After alarm deactivation, SM enters alarm in the Deactivated Alarm Log.

5.6.3.1 If the alarm is deactivated by an approved procedure and the alarm is reactivated within 4 hours, a Deactivated Alarm Log entry is not required.

5.6.3.2 If the alarm is deactivated by an approved procedure for longer than 4 hours, completes Deactivated Alarm Log entry using applicable procedure number instead of ADR number.

- 5.6.4 Approved postings are used at all indicators for deactivated alarms to inform personnel of their current condition:
 - 5.6.4.1 Postings indicate that the alarm is OOS or OOC.
 - 5.6.4.2 For computers or similar displays, a log may be maintained instead of a posting. The log must be specific to the terminal and contain the same information as listed in the Alarm Deactivation Log.
 - 5.6.4.3 Do not place postings on security equipment that would give indication of operability.
- 5.6.5 The following additional requirements apply to alarms being permanently deactivated:
 - 5.6.5.1 The organization that is deactivating alarm processes alarm in accordance with Integrated Work Control Program to place alarm OOC.
 - 5.6.5.2 Processes alarm in accordance with Configuration Change Control Program.
 - 5.6.5.3 Generates Nonconformance Reports as required by 1-50000-ADM-15.01.
- 5.6.6 SM monitors status of deactivated alarms by reviewing the Deactivated Alarm Log:
 - 5.6.6.1 Comments Section may be used to document:
 - (1) Corrective actions in progress.
 - (2) Special problems such as unavailable spare parts.

5.6.6.1 (continued)

- (3) Scheduling delays.
- (4) Reasons for not reactivating alarm by required reactivation time/date.
- (5) Other information related to alarm status.

5.6.6.2 Monitors Deactivated Alarm Log and associated ADRs to ensure required compensatory measures are maintained and to ensure alarms are reactivated before their required reactivation time/date.

5.6.6.3 OM performs monthly audit of all deactivated alarms and documents in Comments Section of Deactivated Alarm Log.

5.7 Alarm Reactivation

5.7.1 The organization that is reactivating alarm verifies and documents returning the alarm to service.

5.7.2 If alarm was deactivated in accordance with an approved procedure, documents alarm reactivation as required by that procedure.

5.7.3 Obtains approval from OM or SM to reactivate alarm.

5.7.4 When alarm is reactivated, Operator provides signature, time, and date on ADR.

5.7.5 After alarm is reactivated, SM records time and date of actual alarm reactivation on Deactivated Alarm Log.

NOTE

Reactivation verification includes measures to demonstrate alarm operability.

- 5.7.6 Reactivation verification is performed to ensure the alarm has been returned to operable status.
 - 5.7.6.1 For safety class alarms, Systems Engineering performs reactivation verification.
 - 5.7.6.2 For all other types of alarms, System Owner/Manager or Shift Technical Advisor performs reactivation verification.
 - 5.7.6.3 Verifier documents reactivation verification by signing and dating ADR.
- 5.7.7 After alarm is reactivated and verification has been completed, SM verifies reactivation has been completed:
 - 5.7.7.1 Verifies reactivation section of ADR has been completed.
 - 5.7.7.2 Verifies actual reactivation time/date is recorded on Deactivated Alarm Log.
 - 5.7.7.3 Documents completion of alarm reactivation by initialing Deactivated Alarm Log.

6. RECORDS

- 6.1 SM maintains Deactivated Alarm Log in SM office.
 - 6.1.1 When all alarms listed on a log page are reactivated, maintains that page in a separate section of the binder.

- 6.1.2 Maintains all completed log pages for at least 1 year.
- 6.2 SM maintains ADRs in the Deactivated Alarm Log binder.
 - 6.2.1 After concurrence, approval, and alarm deactivation, maintains ADRs in Deactivated Alarm Log binder.
 - 6.2.2 After reactivation, maintains completed ADRs in a separate section of the binder.
 - 6.2.3 Maintains completed ADRs in the Deactivated Alarm Log binder for at least 1 year following alarm reactivation.
- 6.3 The OM ensures Deactivated Alarm Log Sheets and ADRs are dispositioned in accordance with the RFP Records Management Manual and the RFP Quality Assurance Manual.

7. REFERENCES

- 7.1 Configuration Change Control Program Manual
- 7.2 DOE Order 5000.3, Unusual Occurrence Reporting System
- 7.3 DOE Order 5480.1B, Environmental, Safety, and Health Program for Department of Energy Operations
- 7.4 FSAR, Chapter 7, Operation Safety Requirements Limiting Conditions for Operations (LCOs)
- 7.5 HSP, Section on Safety Analysis Report (SAR) Program
- 7.6 Integrated Work Control Program Manual

- 7.7 POPR-5.4, Shift Turnover and Relief
- 7.8 RFP Quality Assurance Manual
- 7.9 RFP Records Management Manual
- 7.10 1-15320-HSP-2.08, Lockout/Tagout
- 7.11 1-50000-ADM-15.01, Control of Nonconforming Items

APPENDIX 1
Page 1 of 2

SAMPLE ALARM DEACTIVATION REQUEST (ADR)

ALARM DEACTIVATION REQUEST		ADR No.: _____
O R I G I N A T O R	Type of Alarm: _____	Identification No.: _____
	Building: _____	Deactivation from _____ Time/Date to _____ Time/Date
	Location: _____	
	System: _____	
	Drawing No.: _____	
	Lockout/Tagout No.: _____	
	Reason for Deactivation (use numbered attachment pages as necessary): 	
	Initiating Documents (MWOs, NCRs, DRs, etc.): 	
	Is this alarm safety related? _____ No If Yes, describe compensation measures (use numbered attachment pages as necessary): 	
	Is this alarm an LCO requirement? _____ Yes _____ No If Yes, what is LCO Number? _____	
<u>DEACTIVATION</u>		
<u>CONCURRENCE:</u>		
Other _____	Date _____	System Owner/Manager _____
		Date _____
<u>APPROVAL FOR DEACTIVATION:</u>		<u>ALARM DEACTIVATED:</u>
Operations/Shift Manager _____	Date _____	Operator _____
		Time/Date _____
<u>REACTIVATION</u>		
<u>ALARM REACTIVATED:</u>		
Operations/Shift Manager _____	Date _____	(Check One) _____ Date _____
Operator _____	Time/Date _____	<input type="checkbox"/> Systems Engineering (safety alarms only)
		<input type="checkbox"/> System Owner/Manager (all other alarms)

APPENDIX 1
Page 2 of 2

INSTRUCTIONS FOR COMPLETING ALARM DEACTIVATION REQUEST

The Originator provides primary reference information. All line items should be completed and double checked prior to submitting the request for approval.

1. Determine type of alarm (safety class item or nonsafety class item). If the alarm is classified as safety class item, the public and/or environment may be at risk by deactivating the alarm. Any questions concerning alarm classification should be discussed with H&S or Operations Manager.
2. Provide building number.
3. Provide location, including such nonwork areas as locker room or entry way.
4. Provide system name for which the alarm is a part (for example, Life Safety/Disaster Warning System).
5. When engineered compensation measures are required, provide drawing number. When drawing number is not required, mark this item N/A.
6. If a lockout/tagout will be used to deactivate the alarm, provide the lockout/tagout number. If lockout/tagout is not used, mark this item N/A.
7. Provide identification number located on the alarm.
8. Provide planned deactivation time period. This will be from the planned deactivation time/date to the required reactivation time/date.
9. Provide a brief but complete description of the reason for alarm deactivation.
10. List all documents that provide the reason for and/or direct deactivation of the alarm.
11. If alarm is classified as safety class, provide complete description of compensation measures required during alarm deactivation.
12. Determine if deactivation of this alarm will affect minimum alarm capability required by FSAR, Chapter 7, Operation Safety Requirements Limiting Conditions for Operation (LCOs). If alarm is required by LCOs, provide applicable LCO numbers.

Concurrence and approval are required prior to deactivation of the alarm.

13. Other concurrence as required by Operations Manager is required for deactivation of all alarms.
14. System Owner/Manager concurrence is required for deactivation of all alarms.
15. If the alarm is classified as safety class, Systems Engineering concurrence is required. For all other types of alarms, mark this concurrence line N/A.
16. Approval is normally obtained from Operations Manager. If Operations Manager is not available, approval may be obtained from Shift Manager.
17. ADR number is assigned by Operations Manager after approval and is then documented in header block of ADR.
18. When the alarm is deactivated, the Operator's signature, time, and date are recorded.

Reactivation documents returning the alarm to service.

19. Operations Manager/Shift Manager approval is required prior to reactivation.
20. When alarm is reactivated, the Operator's signature, time, and date are recorded.
21. For safety class alarms, reactivation verification is performed by Systems Engineering. For all other types of alarms, reactivation verification is performed by System Owner/Manager or Shift Technical Advisor.

Page: _____

Operations Manager: _____

Building: _____

[illegible]

SAMPLE DEACTIVATED ALARM LOG

1. Print name of Operations Manager, building number, and page number at top of each page.
 2. Copy ADR number from ADR. If alarm is deactivated by approved procedure, enter procedure number in place of ADR number
 3. Enter responsible organization. This is the organization responsible for ordinary cyclical checking and maintenance of the alarm.
 4. Copy alarm identification number, location, safety classification, actual deactivation time/date, and required reactivation time/date from ADR.
 5. Use Comments Section to document corrective actions and special problems, such as unavailable parts, scheduling delays, or reasons for not reactivating alarm by required reactivation time/date.
 6. When alarm is reactivated:
 - a. Enter actual reactivation time/date.
 - b. After verification that alarm has been reactivated, Shift Manager initials ADR log.

CONTROLLED DEACTIVATION OF ALARMS

APPENDIX 2

Page 1 of 1

1-31000-COOP-017
REVISION 0
PAGE 21 OF 21

✓

**COOP-019 CANCELED,
PLEASE SEE COOP-001**

Refer to 1-A01-PPG-001 for Processing Instructions.
Print or Type All Information (Except Signatures).

1. Date 02/22/95		25. DMR No. 95-DMR-000419	
2. Existing Document Number/Revision 1-31000-COOP-019 Rev. 0		3. New Document Number or Document Number if it is to be changed with this Revision N/A	
4. Originator's Name/Phone/Pager/Location [Redacted] thty Serafin 6278 /d3414 /Bldg.441		5. Document Title Returning Systems and Equipment to Service	
6. Document Type <input checked="" type="checkbox"/> Procedure <input type="checkbox"/> Other		7. Document Modification Type (Check only one) <input type="checkbox"/> New <input type="checkbox"/> Revision <input type="checkbox"/> Intent Change <input type="checkbox"/> Nonintent Change <input type="checkbox"/> Editorial Correction <input checked="" type="checkbox"/> Cancellation	
8. Item	9. Page	10. Step	11. Proposed Modifications
			Cancel procedure
12. Justification (Reason for Modification, EJO's, TP's, etc.) 1-31000-COOP-019 is incorporated into 1-31000-COOP-001, Conduct of Operations, in an attempt to streamline for necessary and sufficient standards.			
If modification is for a new procedure or a revision, list concurring disciplines in Block 13, and enter N/A in Blocks 14 and 15. If modification is for any type of change or a cancellation, organizations are listed in Block 13, then Concuror prints, and signs in Block 14, and dates in Block 15.			
13. Organization	14. Print, Sign (if applicable)		15. Date (if applicable)
AS	W.D. Scheuerman [Signature]		3-9-95
BD	[Signature]		3-9-95
E&SS	[Signature]		3/8/95
PA	[Signature]		3/8/95
SNM	[Signature]		3/7/95
WM	[Signature]		3-9-95
WS	[Signature]		5/6/95
16. Originator's Supervisor (print/sign/date) M. M. McDonald [Signature] 3-7-95			
17. Assigned SME/Phone/Pager/Location [Redacted] nk Gibbs 2786 / d6006 / T893B		18. Cost Center 3095	19. Charge Number 811230
20. Requested Completion Date 5/1/95		21. Effective Date 5/1/95	
22. ORC Review [Redacted] Patrick [Signature] #50RC-95-015		4-4-95	
24. Responsible Manager (print/sign/date) M. M. McDonald [Signature] 3-20-95			

PADC-93-00438

CONTROLLED COPY

REVIEWED FOR CLASSIFICATION / UONI

BY [Signature]

DATE 03/07/95 (4/95)

03/14/97

APPENDIX 3
Page 1 of 3

Page 1 of			DOCUMENT MODIFICATION REQUEST (DMR)			25. DMR No.		
Print or Type all information (except signatures)						97-DMR-001776		
1. Name/Phone/Pager/Location			G. Miller/5789/212-3276/B111			2. Date		
3. Existing Document Number and Revision			1-C15-COOP-020 REV 1			4. Document Type:		
5. Document Title			Termination of Operations Process			<input type="checkbox"/> Policy <input type="checkbox"/> Manual <input type="checkbox"/> Directive <input checked="" type="checkbox"/> Procedure <input type="checkbox"/> Instructions <input type="checkbox"/> Job Aid <input type="checkbox"/> Other		
6. Item	7. Page	8. Step	9. Proposed Modification					
1	14	5.3(1) Note	Appendix 3, Material-at-Risk (MAR) should be used as a guideline to conservatively define operations allowed in a facility while out of compliance with the Authorization Basis. Facilities whose Authorization Bases define non-LCO affected operations or prescribe actions for termination of LCO affected operations SHALL follow the prescriptions of the Authorization Basis. Where the facility Authorization Basis is not prescriptive, Appendix 3 should be used to determine which operations are non-LCO affected. Facility Management should work closely with Nuclear Engineering in making this determination.					
2	N/A	N/A	UPDATE LCO'S AND TBC. <i>DM</i> 12/16/97					
10. Item			10. a Justification (Reason for Modification, EJO #, IP#, etc.)					
Where facility Authorization Bases prescribe guidelines for non-LCO affected operations, those documents should take precedence over the MAR table of COOP 020.								
11. <input checked="" type="checkbox"/> Process (Complete Blocks 13-22)			(print/sign/date)					
<input type="checkbox"/> Do not Process (state reason in Block 10 a)			R.E. Kell for D. B. Branch <i>R.E. Kell</i> 12/2/97					
12. Assigned SME/Phone/Pager/Location			13. New Document/Rev. No. (if new or changed)					
D. B. Branch/4833/4691/B111			N/A					
Complete either Section 14a or 14b as applicable								
14a. Type of Complete Modification			14b. Changes: (check the applicable boxes)			Additional Attributes:		
<input type="checkbox"/> New <input type="checkbox"/> Revision <input type="checkbox"/> Cancellation <input type="checkbox"/> One-Time-Use			<input type="checkbox"/> Intent Change <input checked="" type="checkbox"/> Nonintent Change <input type="checkbox"/> Editorial Correction <input type="checkbox"/> Regular <input checked="" type="checkbox"/> Interim Approval Request - Needed for immediate use (30-day limit for obtaining final approval)			<input type="checkbox"/> Temporary <input type="checkbox"/> One-Time-Use <input type="checkbox"/> Limited Distribution		
15. ERM Change Control Board Required: <input type="checkbox"/> Yes <input type="checkbox"/> No (Applicable only to new procedures, revisions, and intent changes.)								
List the reviewing organization in Block 16. After concurrence has been obtained on the Comment Sheet, enter the name of the reviewer followed by <i>NI</i> in Block 17. If the reviewer indicates No comments, the review signature constitutes concurrence. Enter the date concurrence is obtained in Block 18.								
16. Reviewing Org.	17. Name of Reviewer for that Organization	18. Date	16. Reviewing Org.	17. Name of Reviewer for that Organization	18. Date			
19. Prescreen/SES/USQD Number			20. Independent Safety Review Meeting and Date					
N/A			N/A					
21. <input type="checkbox"/> Process Policy Action (This block required for Policies only)			Reviewed by V.P. w/responsibility for the Policy Program. (print/sign/date)					
<input type="checkbox"/> Do not Process (state reason in Block 10a)								
22. Approval Authority signs after obtaining ALL required signatures.			(print/sign/date)			23. Effective Date		
D. B. BRANCH/ <i>DBB</i>			/12/5/97			JANUARY 1, 1998		
						24. Expiration Date		

PADC-94-00013

CONTROLLED COPY

97-DMR-000202

03/14/97

APPENDIX 3
Page 1 of 3

Page 1 of 1			DOCUMENT MODIFICATION REQUEST (DMR) <i>Print or Type all information (except signatures)</i>		25. DMR No. 97-DMR-000 835	
Originator						
1. Name/Phone/Pager/Location Frank E. Gibbs				2. Date 7/14/97		
3. Existing Document Number and Revision 1-C15-COOP-20 Rev. 1				4. Document Type: <input type="checkbox"/> Policy <input type="checkbox"/> Manual <input type="checkbox"/> Directive <input checked="" type="checkbox"/> Procedure <input type="checkbox"/> Instructions <input type="checkbox"/> Job Aid <input type="checkbox"/> Other		
5. Document Title Termination of Operations Process						
6. Item	7. Page	8. Step	9. Proposed Modification			
1	27	App 3	Delete the last bullet on Appendix 3, Page 1 of 3			
2	2	LOEP	update			
10. Item						
10. a Justification (Reason for Modification, EJO #, TP#, etc.) Step deleted due to potential misinterpretation. This requirement was originally aimed at loss of ventilation but the procedure implies more than just loss of ventilation.						
11. <input checked="" type="checkbox"/> Process (Complete Blocks 13-22) (print/sign/date) <input type="checkbox"/> Do not Process (state reason in Block 10 a) /s/ D. P. Snyder D.P. Snyder 7/15/97						
12. Assigned SME/Phone/Pager/Location F. E. Gibbs 2786/6006/441				13. New Document/Rev. No. (if new or changed)		
Complete either Section 14a or 14b as applicable						
14a. Type of Complete Modification <input type="checkbox"/> New <input type="checkbox"/> Revision <input type="checkbox"/> Cancellation <input type="checkbox"/> One-Time-Use			14b. Changes: (check the applicable boxes) <input checked="" type="checkbox"/> Intent Change <input type="checkbox"/> Nonintent Change <input type="checkbox"/> Editorial Correction <input type="checkbox"/> Regular <input type="checkbox"/> Interim Approval Request - Needed for Immediate use (30-day limit for obtaining final approval)			Additional Attributes: <input type="checkbox"/> Temporary <input type="checkbox"/> One-Time-Use <input type="checkbox"/> Limited Distribution
15. ERM Change Control Board Required: <input type="checkbox"/> Yes <input type="checkbox"/> No (Applicable only to new procedures, revisions, and intent changes.)						
List the reviewing organization in Block 16. After concurrence has been obtained on the Comment Sheet, enter the name of the reviewer followed by /s/ in Block 17. If the reviewer indicates No comments, the review signature constitutes concurrence. Enter the date concurrence is obtained in Block 18.						
16. Reviewing Org.	17. Name of Reviewer for that Organization	18. Date	16. Reviewing Org.	17. Name of Reviewer for that Organization	18. Date	
SME	/s/ R. Hill	7-15-97				
SS&E	/s/ R. Schenberger	7-17-97				
EC&M	/s/ G. m. Kelly	7-15-97				
NOP	/s/ D. B. Branch	7-15-97				
RMRS	/s/ H. J. Blader	7-21-97				
SSOC	/s/ R. A. Eschenbaum	7-15-97				
19. Prescreen/SES/USQD Number 97-1061-3AB			20. Independent Safety Review Meeting and Date SORC 97-036			
21. <input type="checkbox"/> Process Policy Action (This block required for Policies only) <input type="checkbox"/> Do not Process (state reason in Block 10a) N/A						
22. Approval Authority signs after obtaining ALL required signatures. (print/sign/date) D.P. Snyder 9/18/97						23. Effective Date 9/18/97
						24. Expiration Date

Cos
7/15/97

97-DMR-000202

PADC-94-00013

CONTROLLED COPY

03/14/97

APPENDIX 3
Page 1 of 3

Page 1 of 1			DOCUMENT MODIFICATION REQUEST (DMR) <i>Print or Type all information (except signatures)</i>			25. DMR No. 97-DMR-000622		
Originator			1. Name/Phone/Pager/Location F. E. Gibbs 2786/6006/441			2. Date 5/13/97		
3. Existing Document Number and Revision 1-C15-COOP-20			4. Document Type: <input type="checkbox"/> Policy <input type="checkbox"/> Manual <input type="checkbox"/> Directive <input checked="" type="checkbox"/> Procedure <input type="checkbox"/> Instructions <input type="checkbox"/> Job Aid <input type="checkbox"/> Other					
5. Document Title TERMINATION OF OPERATIONS PROCESS								
6. Item	7. Page	8. Step	9. Proposed Modification					
1	4	2.	ADD - The implementation of Revision 1 of this procedure will commence on 04/07/97 and SHALL be fully implemented in all RFETS facilities no later than 05/09/97.					
10. Item			10. a Justification (Reason for Modification, EJO #, TP#, etc.) Clarification to allow for graded approach of implementation of Rev. 1					
11. <input checked="" type="checkbox"/> Process (Complete Blocks 13-22) <input type="checkbox"/> Do not Process (state reason in Block 10 a)			(print/sign/date) /s/ Dan Branch 5/19/97					
12. Assigned SME/Phone/Pager/Location F. E. Gibbs 2786/6006/441			13. New Document/Rev. No. (if new or changed)					
14a. Type of Complete Modification <input type="checkbox"/> New <input type="checkbox"/> Revision <input type="checkbox"/> Cancellation <input type="checkbox"/> One-Time-Use			14b. Changes: (check the applicable boxes) <input checked="" type="checkbox"/> Intent Change <input type="checkbox"/> Nonintent Change <input type="checkbox"/> Editorial Correction <input type="checkbox"/> Regular <input type="checkbox"/> Interim Approval Request - Needed for Immediate use (30-day limit for obtaining final approval)			Additional Attributes: <input type="checkbox"/> Temporary <input type="checkbox"/> One-Time-Use <input type="checkbox"/> Limited Distribution		
15. ERM Change Control Board Required: <input type="checkbox"/> Yes <input type="checkbox"/> No (Applicable only to new procedures, revisions, and intent changes.) List the reviewing organization in Block 16. After concurrence has been obtained on the Comment Sheet, enter the name of the reviewer followed by /s/ in Block 17. If the reviewer indicates No comments, the review signature constitutes concurrence. Enter the date concurrence is obtained in Block 18.								
16. Reviewing Org.	17. Name of Reviewer for that Organization	18. Date	16. Reviewing Org.	17. Name of Reviewer for that Organization	18. Date			
SME	/S/ F. E. Gibbs	5/15/97						
19. Prescreen/SES/USQD Number Not Required			20. Independent Safety Review Meeting and Date 5/23/97 Reviewed by V.P. w/responsibility for the Policy Program. (print/sign/date)					
21. <input type="checkbox"/> Process Policy Action (This block required for Policies only) <input type="checkbox"/> Do not Process (state reason in Block 10a)								
22. Approval Authority signs after obtaining ALL required signatures. /s/ Dan Branch 5/19/97			(print/sign/date)			23. Effective Date 5/19/97		
						24. Expiration Date		

PADC-94-00013

CONTROLLED COPY

7-DMR-000202

Rocky Flats Plant

1-C15-COOP-020

REVISION 1

TERMINATION OF OPERATIONS PROCESS

APPROVED BY: R. E. Kill Jr / G. M. Voorheis 3/14/97
 Vice President Print Name Date
 Kaiser-Hill Company, L.L.C.

Responsible Organization: Nuclear Operations Effective Date: 4/7/97

CONCURRENCE BY THE FOLLOWING DISCIPLINES IS DOCUMENTED IN THE PROCEDURE HISTORY FILE:

Engineering Integrating Technical Services
 Environmental Restoration/Waste Management & Integration
 Nuclear Engineering
 Rocky Mountain Remediation Services
 Safe Sites of Colorado
 Special Material Management and Integration

USE CATEGORY 4

The procedure is available at a known location for reference.

ORC review SORC-96-041 (11/12/96)

The following have been incorporated in this revision:
 96-DMR-001017

Reviewed for Classification/UCNI

By [Signature] (U/NU)
 Date 18 March 1997

Periodic review frequency: 4 years from the effective date

LIST OF EFFECTIVE PAGES

<u>Pages</u>	<u>Effective Date</u>	<u>Pages</u>	<u>Effective Date</u>
1	04/07/97		
2	01/01/98		
3	04/07/97		
4	05/19/97		
5-13	04/07/97		
14	01/01/98		
15-26	04/07/97		
27	09/18/97		
28-30	04/07/97		

The following DMRs are active for this document:

97-DMR-000622

97-DMR-000835

97-DMR-001776

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
TITLE PAGE	1
LIST OF EFFECTIVE PAGES.....	2
TABLE OF CONTENTS	3
1. PURPOSE	4
2. SCOPE.....	4
3. OVERVIEW.....	4
3.1 Basis for Operability	5
3.2 Termination of Operations	6
3.3 OSR/TSR Interface.....	6
3.4 JCO Connection	7
3.5 Limiting Conditions for Operations and Surveillance Requirements	7
4. RESPONSIBILITIES	9
4.1 Division Manager, Integrating Management Contractor (IMC)	9
4.2 Engineering Manager	9
4.3 Facility/Operations Manager.....	9
4.4 Nuclear Engineering Manager.....	10
4.5 Shift Manager.....	10
5. INSTRUCTIONS	11
5.1 Planned Out-of-Tolerance (OOT) Conditions	11
5.2 Operability Determination	12
5.3 Termination of LCO-Affected Operations.....	14
5.4 Management of Potential Unreviewed Safety Questions.....	18
5.5 Return to Service and Operability Declaration	19
6. RECORDS	21
7. REFERENCES.....	21
<u>Appendixes</u>	
Appendix 1, Technical Concern Assessment Checklist.....	23
Appendix 2, System Return-to-Service and Operability Checklist.....	25
Appendix 3, Material at Risk Limits (MAR) for Non-LCO Affected Operations	27
Appendix 4, Resumption of LCO-Affected Operations Following an Authorization Basis Violation.....	30

1. PURPOSE

This procedure defines the formal process by which affected operations in a nuclear facility are terminated (or other required actions are taken) in the event of an out-of-tolerance condition, authorization basis violation, or Operational Safety Requirement/Technical Safety Requirement (OSR/TSR) violation. In addition, this procedure defines a process by which conditions are evaluated and submitted in accordance with 1-C11-NSM-04.05, Unreviewed Safety Question Determination. This procedure also provides instructions for determining the operability status of a deficient safety class system and defining Limiting Condition for Operation (LCO)-affected operations.

2. SCOPE

This procedure applies to all Rocky Flats Environmental Technology Site (Site) employees and subcontractors.

This procedure addresses the following topics:

- Planned out-of-tolerance (OOT) Conditions
- Operability determination
- Termination of LCO-affected operations
- Management of potential Unreviewed Safety Questions (USQDs)
- Return to service and operability declaration

This procedure also defines a link to the justification for continued operation (JCO) process in accordance with 1-R26-NSM-04.06, Justification for Continued Operation (JCO) Preparation.

The implementation of Revision 1 of this procedure will commence on 04/07/97 and SHALL be fully implemented in all RFETS facilities no later than 05/09/97. This revision is a total rewrite and revision bars are omitted.

3. OVERVIEW

A nuclear facility's authorization basis is the licensing agreement between the Department of Energy (DOE) and the Site Integrating Management Contractor (IMC) responsible for the operation of the facility. This authorization basis is described in the facility's approved Final Safety Analysis Report (FSAR), Basis for Operation (BFO), or Basis for Interim Operation (BIO) as modified by approved USQs.

97-DMR-000622

3. OVERVIEW (continued)

Additionally, when it is necessary to conduct operations outside of the authorization basis, JCOs may be approved by the DOE/Rocky Flats Field Office (RFFO).

Compliance with the authorization basis requires strict adherence to provisions of the OSRs or TSRs. If compliance cannot be maintained, appropriate remedial/required actions must be initiated. Compliance with the authorization basis must be carefully documented and continually demonstrated in the process of making operability determinations for safety class equipment, managing of planned OOT conditions, and entering or exiting remedial/required actions, such as termination of affected operations.

3.1 Basis for Operability

The basis for an operability determination must be documented and always require compliance with relevant OSR/TSR provisions. If an OOT condition exists, then the affected Safety Class/System Structure and Components SC/SSC will be declared inoperable unless conditions are met for a degraded system as described in the applicable authorization basis. Remedial/required actions continue until the LCO, JCO, or Page Change is implemented or until the IMC concurrence is received to resume an activity.

Ensuring operability consists of formal verification by surveillance and by formal operability determination to ensure the ability of the SC/SSC to perform its specified function. Additional verification of operability is supported by ongoing processes such as:

- Implementation of surveillance testing and inspection programs.
- Periodic facility walkdowns and tours.
- Observations and/or readings taken from the Control Room or during rounds.
- Quality Assurance (QA) activities, such as audits and assessments of the implementing programs.

The determination of operability for a SC/SSC is made promptly with a timeliness commensurate with the potential safety significance of the deficiency. In the time before final determination of operability status, if the Facility Manager has a reasonable

3.1 Basis for Operability (continued)

expectation that the affected SC/SSC is operable and the prompt determination process will most likely support that expectation, the Facility Manager may choose to consider the SC/SSC operable. If there is doubt as to operability status, the Facility Manager declares the SC/SSC inoperable and takes remedial/required action, as required by the relevant authorization basis document.

3.2 Termination of Operations

Termination of operations is initiated as a specified remedial/required action, when a SC/SSC deficiency which affects operability (such as equipment failure, failure of an LCO surveillance or an OSR/TSR violation is identified). In general, the necessary action required for termination of operations is to halt those activities that are protected by the SC/SSCs containing the deficiency and to initiate efforts to correct the deficiency.

3.3 OSR/TSR Interface

The remedial actions for facilities which contain authorization basis documents which were developed in the late 1980s typically state that appropriate actions be taken immediately to ensure protection or that the affected operations or buildings be shut down. While the older authorization basis documents generally lack the specificity of the OSR/TSRs, it is clear that the potential for conditions arising that require termination of operations was anticipated.

Facility OSR/TSRs cannot possibly identify every failure mode for every component and subcomponent of an SC/SSC. The surveillance requirements must always be met for credited equipment and components to be considered operable. If an OSR/TSR surveillance requirement cannot be met, the remedial/required actions specified by the OSR/TSR are taken. These actions continue until the failed surveillance is successfully completed or the appropriate technical JCO is developed.

3.4 ICO Connection

In the event that operations beyond that allowed by the remedial actions are desired, a JCO is prepared and processed requesting DOE/RFFO approval for such operations in accordance with 1-R26-NSM-04.06, Justification for Continued Operation (JCO) Preparation. Remedial/required actions remain implemented during the time from the JCO preparation until DOE/RFFO approval and facility implementation of the JCO.

3.5 Limiting Conditions for Operations and Surveillance Requirements

A Facility Manager will be capable at all times of documenting compliance with an OSR/TSR. Upon discovery of a failure to meet an LCO, the associated remedial/required actions will be met as specified in the applicable authorization basis document.

In the case of older authorization bases (e.g., June 1987 FSARs) when an LCO is not being met, the appropriate remedial/required actions will be taken immediately to assure protection, or the affected operations and/or building will be shut down. In some LCOs and LCO surveillance requirements, remedial/required actions are specifically identified.

If the ability to meet the LCO is restored before the specified completion time expires, completion of the remedial/required action is not required, unless specified in the applicable authorization basis document, and completion of Appendix 2, System Return-to-Service and Operability Checklist, is not required.

Equipment removed from service or declared inoperable may be operated under administrative control of Site infrastructure procedures for tests to demonstrate operability of that equipment or other equipment. An example would be the restart of an Uninterruptible Power System (UPS) to conduct load testing for verification of output readings and would be accomplished in accordance with the Site Integrated Work Control Program (IWCP).

When a support system is not functional and an LCO for that support system is specified in the authorization basis, the supported system is not required to be declared inoperable due solely to support system inoperability.

3.5 Limiting Conditions for Operations and Surveillance Requirements (continued)

When a support system is not functional and there is no LCO specified, the impact of the degradation of the support system's function on the operability of the supported systems will be evaluated by the Facility Manager using Appendix 1, Technical Concern Assessment Checklist, as appropriate.

Measurement devices used to demonstrate compliance with LCOs will be calibrated to Site design, manufacturer's specifications, and/or industry standards, as applicable. A device found to be out of calibration does not constitute an OOT condition, unless the device is being used to satisfy an LCO or LCO surveillance requirement.

Surveillance frequencies which are specified in 1-U70-COOP-005, Authorization Basis Tracking and Documentation will be met. The failure of an LCO surveillance requirement requires that the SC/SSC be declared inoperable and the remedial/required actions be taken.

If the LCO surveillance is not performed within the frequency defined in 1-U70-COOP-005, the LCO will immediately be declared not met, and the applicable remedial/required actions will be entered. The completion times of the remedial/required actions begin immediately on expiration of the surveillance frequency.

When the LCO surveillance is performed within the delay period and the LCO surveillance is not met, the remedial/required actions will be entered. The completion times of the remedial/required actions begin immediately on failure to meet the LCO surveillance.

4. **RESPONSIBILITIES**

4.1 **Division Manager, Integrating Management Contractor (IMC)**

Authorizes the restart of LCO-affected operations which were terminated as a result of an authorization basis violation.

Verbally notifies DOE/RFFO of the restart of LCO-affected operations which were terminated as a result of an authorization basis violation and of the preliminary Root Cause in accordance with 1-11000-ADM-16.03, Cause Analysis.

4.2 **Engineering Manager**

Supports the Facility Manager/Operations Manager in determining the operability of an SC/SSC.

NOTE *Decontamination and Deactivation (D&D) operations-owned buildings are structured as project teams and, as such, do not have Facility Managers. The responsible persons for these facilities are Project Managers.*

4.3 **Facility /Operations Manager**

Determines the operability of an SC/SSC.

Identifies the areas affected by an OOT condition or violation.

Ensures the satisfactory implementation of termination of LCO-affected operations.

Ensures that all documents associated with this procedure are available.

Ensures that the requirements for resumption of terminated operations are satisfactorily fulfilled.

Reviews relevant authorization basis documents for acceptance (such as JCOs, BFOs, BIOs, FSARs, or USQs) and ensures satisfactory implementation.

4.4 Nuclear Engineering Manager

Supports the Facility Manager/Operations Manager in defining LCO-affected operations.

Ensures that appropriate authorization basis documents are prepared to support LCO-affected operations.

4.5 Shift Manager

Implements the termination of LCO-affected operations as directed by the Facility/Operations Manager and as implemented by the appropriate work instruction (e.g., Operations Order or procedure).

Maintains a record in the Shift Manager's Log of all terminated LCO-affected operations.

Notifies the Division Manager, IMC of activities associated with the termination of unplanned LCO-affected operations.

Reports the termination of an LCO-affected operation or an unplanned event in accordance with 1-D97-ADM-16.01, Occurrence Reporting Process.

5. INSTRUCTIONS

5.1 Planned OOT Conditions

Facility Manager, Operations Manager, or Shift Manager

- [1] IF the performance of a planned activity (except for normal LCO surveillances) will result in not complying with the requirement of an LCO,

THEN:

- [A] Implement the applicable remedial/required actions prior to initiating the activity.
- [B] Verbally notify the DOE Facility Representative just prior to the start of the activity.

Notification includes a description of the systems impacted and the duration of the planned OOT.

Shift Manager

- [C] Record the following in the Shift Manager's Logbook:
- The activity
 - The SC/SSC impacted
 - The notification to the DOE/RFFO Facility Representative
 - The time the OOT condition is entered and exited

5.2 Operability Determination

NOTE *The Technical Concern Assessment Checklist may be used for asking questions or obtaining a clarification for an Engineering Operability Evaluation (EOE).*

Facility Manager, Operations Manager, or Shift Manager

[1] **WHEN** a technical concern that calls into question the operability of an SC/SSC is identified,

THEN use Appendix 1, Technical Concern Assessment Checklist, to document the operability determination by considering, as appropriate, the following:

- The safety function of the affected systems
- The effect of the deficiency on the identified safety functions
- The cumulative effect of other building conditions on the identified safety functions
- Compliance with applicable provisions of the OSR/TSR or other authorization basis document

[2] **IF** it is clear that the SC/SSC is operable,
THEN:

[A] Document the deficiency in accordance with the IWCP as necessary.

[B] Continue normal operations.

NOTE 1 *One method to establish operability is to demonstrate the ability of an SC/SSC to meet the acceptance criteria of the applicable LCO surveillance requirements.*

NOTE 2 *Before completing a Technical Concern Assessment Checklist or requesting an EOE, every effort should be made to repair or rework existing deficiencies. This effort may eliminate the necessity of the Technical Concern Assessment Checklist or the EOE.*

[3] **IF** there is any question as to the operability status of a system,
THEN Document the operability determination on the Technical Concern Assessment Checklist.

5.2 Operability Determination (continued)

This may result in the processing of an EOE in accordance with 2-L97-COEM- AMN-163, Engineering Operability Evaluation (EOE) Preparation. The identification of a technical concern and request for an EOE is based on a reasonable expectation that the technical concern or EOE will conclude that the affected SC/SSC is operable. Substantiation of an interim conclusion that the affected SC/SSC is operable is documented in the technical concern.

- [4] IF a reasonable expectation does NOT exist that the affected SC/SSC will be deemed operable,
THEN:

[A] Declare the SC/SSC inoperable.

[B] Initiate remedial/required actions until a formal determination is made or the deficiency is repaired.

- [5] IF a time for remedial/required actions is NOT specified in the applicable authorization basis document,
THEN initiate the action to place the facility in a safe configuration within 30 minutes.

Engineering Manager

- [6] Review and signoff the Technical Concern Assessment Checklist in a timely manner,
- [7] Initiate the applicable Engineering documents, as necessary.

5.3 Termination of LCO-Affected Operations

For OSR/TSR OOT, the contractor has two options to allow continuation of LCO-affected operations: to repair the OOT condition or to submit one of the following for DOE/RFFO approval:

- Page Change to remove or alter the OSR/TSR requirements
- JCO

In the case where remedial/required action dictates that LCO-affected operations shall be terminated, EOE's and technical concerns can only be used to determine the area of termination, such as, what area is served by the OOT SC/SSC.

Facility Manager or Shift Manager

- [1] **WHEN** an SC/SSC is inoperable
OR an OSR/TSR OOT or an authorization basis violation has occurred,
THEN:
- [A] Immediately implement the specified remedial/required actions.
- [B] **IF** a time for remedial/required actions is **NOT** specified in the applicable authorization basis document,
THEN initiate the action to place the facility in a safe configuration within 30 minutes.
- [C] Report the discovered condition to DOE in accordance with 1-D97-ADM-16.01.

NOTE *Appendix 3, Material-at-Risk (MAR) should be used as a guideline to conservatively define operations allowed in a facility while out of compliance with the Authorization Basis. Facilities whose Authorization Bases define non-LCO affected operations or prescribe actions for termination of LCO affected operations SHALL follow the prescriptions of the Authorization Basis. Where the facility Authorization Basis is not prescriptive, Appendix 3 Should be used to determine which operations are non-LCO affected. Facility management should work closely with Nuclear Engineering in making this determination.*

- [2] **IF** the remedial/required actions require termination of operations,
THEN formally document the termination of LCO-affected operations in accordance with 1-G58-COOP-013, Standing, Shift, and Operations Orders, and Appendix 3, Material-at-Risk (MAR) Limits for Non-LCO-affected operations.

97-DMR-001776

5.3 Termination of LCO-Affected Operations (continued)

Non-LCO-affected operations are allowed to continue in accordance with 1-G58-COOP-013. LCO-affected operations may resume upon satisfactory resolution of the OOT condition or declaration of the affected system as operable in accordance with Section 5.5, Return to Service and Operability Declaration.

- [3] **IF** the LCO condition or SC/SSC is restored before the termination of operations is implemented,
 THEN document the condition in accordance with 1-31000-COOP-006,
 Operating Area Logs.

- [4] **IF** operations beyond those allowed by the remedial/required actions are deemed necessary before the repair of the deficiency creating the OOT condition,
 THEN:

[A] Request and process a JCO in accordance with
 1-R26-NSM-04.06.

[B] Continue implementing remedial/required actions during the time of the
 JCO preparation and DOE approval.

Shift Manager

- [5] Clearly state the commencement of termination, as required of the LCO-affected operations by performing one of the following:

[A] Explicitly state the termination of LCO-affected operations in the Shift
 Manager's Log.

[B] Document the termination of operations in accordance with
 1-G58-COOP-013.

- [6] Ensure that a building announcement is made after each shift change for up to 24 hrs to notify the building personnel of the new termination of LCO-affected operations.

5.3 Termination of LCO-Affected Operations (continued)

On subsequent shifts, the termination of LCO-affected operations will also be communicated at normal shift-change briefings. This communications shall continue until the termination has been communicated to all Shift Manager watchstanders.

- [7] Document the completion of activities implementing the termination of LCO-affected operations in the Shift Manager's Log.
- [8] Notify the responsible Division Manager, or designee IMC of the termination of LCO-affected operations.
- [9] Update the facility Systems Status Board in accordance with 1-31000-COOP-004, Vital Safety Systems Operational Status, to reflect the current OOT condition.

Facility Manager or Shift Manager

- [10] IF termination of LCO-affected operations is implemented as a result of an authorization basis violation,
AND repair of the deficiency that initiated the violation has occurred,
THEN:

- [A] Document (or record) the following information on Appendix 4, Resumption of LCO-Affected Operations Following an Authorization Basis Violation, to document the request for resumption of operations:
 - Reference the applicable occurrence reports
 - Problem or description of the root cause
 - Immediate actions taken
 - Preliminary root cause of the failures leading to the authorization basis violation in accordance with 1-11000-ADM-16.03
 - Short-term corrective actions that have been taken to prevent recurrence in accordance with 1-D97-ADM-16.01
 - Independent Safety Review of the root cause and implemented short-term corrective actions
- [B] Obtain written concurrence from the responsible Division Manager, or designee IMC to resume operations.

5.3 Termination of LCO-Affected Operations (continued)

Division Manager, IMC

- [11] **IF** termination of LCO-affected operations is implemented as a result of an authorization basis violation,
AND resolution of the deficiency that initiated the violation has occurred,
THEN verbally notify DOE/RFFO of the resumption of operations and the preliminary root cause in accordance with 1-11000-ADM-16.03.

5.4 Management of Potential Unreviewed Safety Questions

Facility Manager or Shift Manager

[1] **WHEN** a contractor identifies information that indicates a potential inadequacy of previous safety analyses,

OR a possible reduction in the margin of safety is identified as defined in the OSRs/TSRs such that a potential for a positive USQ exists,

THEN:

[A] Take action to place the facility in a safe condition until the formal Unreviewed Safety Question Determination (USQD) is completed in accordance with 1-G58-COOP-013.

[B] Notify the responsible Division Manager, or designee of the IMC of the situation upon discovery of the information

[C] Initiate a work request to perform a Safety Evaluation Screen/Unreviewed Safety Question Determination (SES/USQD) in accordance with 1-C10-NSM-04.03, Safety Evaluation Screen.

NOTE *If the Facility Manager cannot support concurrence or notification of the preliminary evaluation of the USQD within the required five working days, the Nuclear Engineering Manager may submit the evaluation to DOE/RFFO without concurrence. Concurrence is then obtained prior to submittal of the final USQD.*

Nuclear Engineering Manager

[2] Provide a preliminary evaluation of the potential USQ to the DOE/RFFO Assistant Manager for Performance Assessment and for Engineering within five working days of discovery.

Facility manager

[3] Review and concur with the preliminary evaluation of the potential USQ.

[4] Summarize the remedial/required actions taken to place the facility in a safe configuration and a schedule for the completion of the formal USQD in the notification.

5.5 Return to Service and Operability Declaration

This process is required for all SC/SSC and may be used for returning non-SC/SSC to service at the discretion of management.

CAUTION

System Return-to-Service and Operability Checklist is to be completed before declaring SC/SSC operable after a formal termination. Applicable remedial/required actions may not be exited until the SC/SSC is declared operable. IMC approval is required for authorization basis violations.

Shift Manager

- [1] Verify the satisfactory completion of the applicable work instruction such as a Post-Maintenance Test (PMT) procedure in accordance with the IWCP or completion of applicable LCO surveillances.
- [2] **IF** return to service of a system is desired,
AND the system was declared inoperable due to an administrative deficiency (such as the inoperable system does not pose a challenge to the safety basis),
THEN:
 - [A] Complete Item 1 on the System Return-to-Service and Operability Checklist.
 - [B] Initial and date items 1 and 8 on the System Return-to-Service and Operability Checklist.
 - [C] Sign and date the System Return-to-Service and Operability Checklist.

5.5 Return to Service and Operability Declaration (continued)

- [3] Obtain technical guidance from the Engineering Manager, as required.

In most cases, any required PMT will be completed before initialing for Item 2 on the System Return-to-Service and Operability Checklist. In some cases, the system will need to be formally returned to service before performing the PMT. In either case, the PMT should be completed before the Facility Manager approval of the System Return-to-Service and Operability Checklist.

- [4] IF the system is a SC/SSC
AND declaration of operability is desired,
THEN:

[A] Notify the Facility Manager of the intent to return the system or equipment to operable status.

[B] Initial and date Items 1 through 8 on Appendix 2.

[C] Sign and date Appendix 2.

Responsible Engineer

- [5] IF concurrence with the service and operability declaration is acceptable,
THEN sign Appendix 2.

Facility Manager

- [6] Review service and operability declaration and indicate approval by signing Appendix 2.

Shift Manager

- [7] Initial and date Items 9 and 10 on Appendix 2, to denote that the system is in service and operable as applicable.

6. RECORDS

Facility Manager

- [1] Establish and maintain the following in accordance with 1-V41-RM-001, Records Management Guidance for Records Sources:
- Appendix 1, Technical Concern Assessment Checklist
 - Appendix 2, System Return-to-Service and Operability Checklist

Division Manager, IMC

- [2] Establish and maintain Appendix 4, Resumption of LCO-affected operations Following an Authorization Basis Violation in accordance with 1-V41-RM-001.

7. REFERENCES

DOE Memorandum, ABG:JMC:07116

1-C10-NSM-04.03, Safety Evaluation Screen

1-C11-NSM-04.05, Unreviewed Safety Question Determination

1-D97-ADM-16.01, Occurrence Reporting Process

1-G58-COOP-013, Standing, Shift, and Operations Orders

1-R26-NSM-04.06, Justification for Continued Operation (JCO) Preparation

1-U70-COOP-005, Authorization Basis Tracking

1-V41-RM-001, Records Management Guidance for Record Sources

1-11000-ADM-16.03, Cause Analysis

1-31000-COOP-004, Vital Safety Systems Operational Status

1-31000-COOP-006, Operating Area Logs and Records

1-31000-COOP-014, Independent Verification

7. REFERENCES (continued)

2-F30-COEM-DES-225, Baseline Document Change Process

2-L97-COEM-AMN-163, Engineering Operability Evaluation (EOE) Preparation

APPENDIX 1

Page 1 of 2

TECHNICAL CONCERN ASSESSMENT CHECKLIST

A. Technical Concern No. _____

B. **DESCRIPTION OF THE CONDITION OR DEFICIENCY:**

C. **SC/SSC DEFICIENCY REVIEW**

NOTE *If this Technical Concern Assessment Checklist is being used for asking questions or obtaining a clarification of an EOE, N/A is checked for questions 1 through 3.*

1. Does an identified SC/SSC deficiency affect the performance of the SC/SSC or its capability to meet its intended function? ☐ YES ☐ NO ☐ N/A
2. Does the deficiency impact the ability of a SC/SSC to successfully meet an LCO or LCO surveillance requirement? ☐ YES ☐ NO ☐ N/A
3. Is the impact of a SC/SSC deficiency uncertain? ☐ YES ☐ NO ☐ N/A

If YES is checked for 1, 2, or 3 above, mark Initiate Engineering Operability Evaluation initiated under E Follow-Up Actions. If NO is checked, complete D, Technical Concern Resolution and E Follow-up Actions.

04/07/97

APPENDIX 1
Page 2 of 2

D. TECHNICAL CONCERN RESOLUTION

Actions taken or resolutions, as appropriate.

E. FOLLOW-UP ACTIONS

☐ No Action Required

☐ EOE or SES/USQD initiated

EOE/SES/USQD # _____

☐ JCO Initiated

JCO # _____

☐ Operations Order initiated to implement
the remedial/required action in accordance with
1-G58-COOP-013.

DOC # _____

Person Completing

Checklist

Date

Facility Manager

Checklist Review

Date

Engineering Manager

Checklist Review

Date

Comments:

04/07/97

APPENDIX 2

Page 1 of 2

SYSTEM RETURN-TO-SERVICE AND OPERABILITY CHECKLIST

System Equipment: _____

Date: _____ Work Instruction No. _____

5.5

1.	If a system was declared inoperable due to an administrative deficiency or a nontermination violation that did not challenge the safety basis as evaluated by 1-C10-NSM-04.03: <ul style="list-style-type: none"> • Verify that the deficiency has been corrected • Skip to step 8 	_____ Initials Date
2.	Appropriate work instructions and testing have been completed.	_____ Initials Date
3.	Necessary auxiliary support systems are in service.	_____ Initials Date
4.	The system or equipment is filled, vented, energized or otherwise configured for operations in accordance with the applicable operating procedure.	_____ Initials Date
5.	For modifications: (Mark N/A if no modifications were performed.)	
5.a	The Baseline Document Change Form (BDCF) is complete (in accordance with 2-F30-COEM-DES-225, Baseline Document Change Process), indicating receipt of the red-lined drawings in the applicable building.	_____ Initials Date
5b.	The required procedures have been issued or revised, as necessary, and appropriate personnel have been briefed or trained.	_____ Initials Date
6.	The appropriate independent verification has been completed in accordance with 1-31000-COOP-014, Independent Verification.	_____ Initials Date
7.	Any remaining deficiencies, NCRs, compensatory measures, remedial/required actions, USQDs, JCOs, EOE's, and ADRs affecting the system have been listed below and dispositioned. _____ _____ _____	_____ Initials Date

04/07/97

APPENDIX 2

Page 2 of 2

8.	All appropriate OSR/TSR surveillances, required for the system to be declared operable, have been completed.	_____ Initials	_____ Date
5.5[2][C]	System in service (Items 1 and 8)	_____ Shift Manager	_____ Date
5.5[4][C]	SC/SSC is operable (Items 1 through 8)	_____ Shift Manager	_____ Date
5.5[5]	Concurrence with the operability declaration is acceptable.	_____ Responsible Engineer	_____ Date
5.5[6]	Service and operability declaration is approved.	_____ Facility Manager	_____ Date
5.5[7]			
9.	The applicable status systems and Shift Managers log book are updated.	_____ Initials	_____ Date
10.	Any applicable Shift Orders/Operations Orders are updated or canceled, as necessary.	_____ Initials	_____ Date

APPENDIX 3
Page 1 of 3

MATERIAL-AT-RISK (MAR) LIMITS FOR NON-LCO AFFECTED OPERATIONS

The following MAR Limits are to be used to define activities which may be considered as non-LCO-affected operations. These limits are to be used for the purpose of allowing low-hazard activities to be performed in facilities which are not fully compliant with the applicable authorization basis document. If the activity-related MAR exceeds the appropriate value in Table 3-1, MAR Limits, the activity can only be conducted when the facility is fully compliant with its OSRs/TSRs or a corresponding JCO is in place covering the activity.

Activity-related MARs should be determined conservatively. If a glovebox is to be entered, the MAR should include the entire inventory of the glovebox, unless arguments can be developed for partitioning of the glovebox inventory due to the size of the glovebox or physical barriers within the glovebox. If the solution in a tank is to be sampled or moved, the entire inventory of the tank should be included in the MAR. Activities should not be partitioned, such that MARs are itemized with specific steps of the activity. For example, it is not appropriate to assess individual item moves separately rather than assessing the evolution.

When container contents are uncertain, activity MARs should be determined accounting for this uncertainty. If the MAR is not characterized in any fashion, form, or quantity, the activity should be considered a LCO-affected operation. The following additional requirements must be met for determination of non-LCO-affected operations:

- Immediate worker controls must be in place to adequately protect the worker, regardless of the determination that an activity is a non-LCO-affected operation. The determination that an activity is a non-LCO-affected operation does not relax any immediate worker safety requirements.
- Activities must be assessed for explosion potential, and any activity that has explosion potential must have an independent determination of whether the activity is a LCO-affected operation or a non-LCO-affected operation by Nuclear Engineering.
- If the determination that an activity is a non-LCO-affected operation utilizes the fire-precluded MAR limits, documented justification for fire being precluded during the activity must be developed concurrently with the implementing work instructions.

The following situations have previously been defined as non-LCO-affected operations and do not have to meet the MAR limits identified above:

- Movement of sealed sources or non-dispersible radioactive materials.

97-DMR-000835

APPENDIX 3
Page 2 of 3

MAR PARAMETERS

FORM OF MATERIAL

Chips. Pieces similar to Radioactive Metal, except that the pieces are much smaller, such as turnings, lab samples, coupons, or unsealed sources.

Confined Materials. Materials (such as wastes) in sealed containers (such as drums). It is assumed that the accident breaches the container (as with a puncture or a fire that pops a lid), and a plume of material is released. The majority of the material remains in the container, however.

High Efficiency Particulate Air (HEPA) Filters. HEPAs that are in a plenum, not in a waste container. If the HEPA filters are in a sealed container, the category Confined Material is used.

Nonvolatile Liquid. Form of material used for aqueous liquids, such as radiologically contaminated water, acid or caustic solutions. Plutonium nitrate and uranyl nitrate solutions fall into this category.

Powder. Finely divided materials, such as plutonium or uranium oxide powders. The accident could be powder pouring out of a container, or exposed powder in a fire, or exposed powder subjected to an explosion.

Radioactive Metal. Bare metal pieces, such as ingots, castings, and briquettes. This form of material is not used with a spill scenario, since no plume of material would be released if a piece of bare metal were to fall.

Resin Material. Resin beads in an ion column or in the plastic bottles used for transferring the beads to the cementation area. Includes dry and wet resins.

Unconfined Combustible Material. Combustibles (such as paper, wood, or cloth) that are fully exposed to the fire (for example, contaminated waste in unsealed drums or on a glovebox floor).

Unconfined Noncombustible Material. Contaminated walls, floors, metal surfaces, and other open-to-the-air noncombustible surfaces (including surface contamination in a glovebox or exhaust duct).

Volatile Liquid. Radiologically contaminated liquid that vaporizes readily at room temperature, such as an organic liquid. Solvents often fall into this category.

MATERIAL

Depleted Uranium. Standard isotopic mix of depleted uranium given in the Rocky Flats Risk Assessment Guide, and used in the FSAR Analysis.

High-Americium Residues. Residues of Item Description Codes (IDCs) 405 through 410 and 427 or other Americium-bearing materials that have less than 9 weight-percent Americium. Include the sum of all actinides.

High Enriched Uranium (HEU). Standard isotopic mix of high enriched uranium given in the Rocky Flats Risk Assessment guide and used in the FSAR analysis.

Low Enriched Uranium (LEU). Uranium enriched less than 4.5% U-235.

Weapons-Grade Plutonium (WGPu). The form of Plutonium (Pu) used in the FSAR, aged for about 70 years, which increases the AM-241 content and decreases the PU-241 content.

APPENDIX 3

Page 3 of 3

MAR Limits for Non-LCO-Affected Operations

If multiple limits are presented in the table, the first limit applies to situations where fire is not precluded and the second limit applies to situations where fire is precluded. Criticalities are precluded by the proposed MAR limits. Activities that can lead to explosions must be evaluated on a case-by-case basis or arguments must be made for the applicability of the MAR limits presented in Table 3-1, MAR Limits.

TABLE 3-1, MAR LIMITS

Form	Aged WGPu	HEU	LEU	DU	Am*	Unknown
Confined	9.9g 50g	700g	700g	9.4 MT 47 MT	2.1g 10g	2.1g 10g
Unconfined Non-combustible	7.1g	700g	700g	4.7 MT	1.0g	1.0g
Unconfined Combustible	0.14g 14g	505g 700g	700g	94 kg 4.7 MT	0.021g 1.0g	0.021g 1.0g
HEPA Filters	14g	700g	700g	9.4 MT	2.1g	2.1g
Radioactive Metal	28g 450g Clad	700g	700g	19 MT unlimited if Clad	4.2g	4.2g
Powder	12g	700g	700g	7.9 MT	1.7g	1.7g
Chips	0.71g	700g	700g	0.47 MT	0.10g	0.10g
Resin	0.62g 5.0g	700g	700g	0.59 MT 4.7 MT	0.13g 1.0g	0.13g 1.0g
Volatile Liquid	0.071g 124g	361g 700g	700g	67 kg 118 MT	0.015g 26g	0.015g 26g
Non-Volatile Liquid	2.5g 124g	700g	700g	2.4 MT 118 MT	0.52g 26g	0.52g 26g
Unknown	0.071g 5.0g	361g 700g	700g	67 kg 4.7 MT	0.015g 1.0g	0.015g 1.0g

MT= Metric Tons

kg = kilograms

g = grams

* This applies to IDCs 405, 406, 407, 408, 409, 410, 427, or any Am enriched IDC that contains less than 9 weight-percent Am. The listed gram value is the sum of all actinides.

04/07/97

APPENDIX 4

Page 1 of 1

**RESUMPTION OF LCO-AFFECTED OPERATIONS FOLLOWING AN
AUTHORIZATION BASIS VIOLATION**

Contractor/Facility _____

Date: _____

Facility Manager _____

Occurrence Report No. _____

Point of Contact _____

IMC Approval to Restart _____

Description of Authorization Basis Violation

Immediate Action

Preliminary Root Cause¹

Short-Term Corrective Actions	Due Date/Status

Signatures:

Facility Manager _____

Date

Independent Safety Review _____

Date

IMC Division Manager/Designee _____

Date

¹1-11000-ADM-16.03, Cause Analysis